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OM protein - protein search, using sw model

Run on: May 26, 2005, 21:44:29 ; Search time 19.3846 Seconds
(without alignments)
1286.219 Million cell updates/sec

Title: US-10-650-585-4
Perfect score: 1771
Sequence: 1 MKKKLEHHHHHTSAGITK.....TTMTSSAWRHPOFGKKKK 334

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*
1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep.*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep.*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep.*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep.*
5: /cgn2_6/ptodata/1/iaa/PTCTUS_COMB.pep.*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1771	100.0	334	4	US-10-017-736C-4
2	1660	93.7	409	4	US-10-017-736C-2
3	1589	89.7	303	4	US-10-017-736C-10
4	1589	89.7	341	4	US-10-017-736C-14
5	1589	89.7	352	4	US-10-017-736C-13
6	1589	89.7	380	4	US-10-017-736C-12
7	1589	89.7	393	4	US-10-017-736C-11
8	1580	89.2	303	4	US-10-017-736C-18
9	1579	89.2	303	4	US-10-017-736C-16
10	1570	88.7	301	4	US-10-017-736C-17
11	1532	86.5	292	4	US-10-017-736C-15
12	1531	86.4	2201	4	US-09-539-601-6
13	1531	86.4	2201	4	US-09-539-601-15
14	1531	86.4	2201	4	US-10-029-907-3
15	1531	86.4	3010	4	US-09-539-601-3
16	1531	86.4	3010	4	US-09-539-601-21
17	1531	86.4	3010	4	US-09-539-601-27
18	1528	86.3	1692	3	US-09-263-933-4
19	1528	86.3	1692	4	US-09-919-901-4
20	1528	86.3	1692	4	US-10-191-966-4
21	1528	86.3	2307	3	US-09-263-933-2
22	1528	86.3	2307	4	US-09-919-901-2
23	1528	86.3	2307	4	US-10-191-966-2
24	1525	86.1	1692	3	US-09-263-933-11
25	1525	86.1	1692	4	US-09-919-901-11
26	1525	86.1	1692	4	US-10-191-966-11
27	1525	86.1	2307	3	US-09-263-933-9
28	1525	86.1	2307	4	US-09-919-901-9
29	1525	86.1	2307	4	US-10-191-966-9
30	1524	86.1	3010	4	US-09-539-601-33
31	1516	85.6	1692	3	US-09-263-933-18
32	1516	85.6	1692	4	US-09-919-901-18
33	1516	85.6	1692	4	US-10-191-966-18
34	1516	85.6	2307	3	US-09-263-933-16
35	1516	85.6	2307	4	US-09-919-901-16
36	1516	85.6	2307	4	US-10-191-966-16
37	1505	85.0	3010	3	US-09-014-416-3
38	1479	83.5	2013	1	US-08-324-977-12
39	1479	83.5	2013	2	US-08-384-616-12
40	1479	83.5	2013	2	US-08-904-686A-12
41	1479	83.5	2013	3	US-09-315-850-12
42	1479	83.5	2201	3	US-08-952-981A-2
43	1479	83.5	2620	1	US-08-324-977-32
44	1479	83.5	2620	2	US-08-384-616-32
45	1479	83.5	2620	2	US-08-904-686A-32

ALIGNMENTS

RESULT 1
US-10-017-736C-4
; Sequence 4, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamare, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-4

Query Match	100.0%	Score	1771;	DB	4;	Length	334;
Best Local Similarity	100.0%	Pred. No.	1.9e-168;				
Matches	334;	Conservative	0;	Mismatches	0;	Indels	0;
Gaps	0;						
QY	1	MK	KKLEHHHHHTSAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGTY	60			
Db	1	MK	KKLEHHHHHTSAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGTY	60			
QY	61	VD	HLTFLQDWAHAGLRDLAVAPVIFSDMEVKIITWGADTAACGDIIISGLPVSARRGR	120			
Db	61	VD	HLTFLQDWAHAGLRDLAVAPVIFSDMEVKIITWGADTAACGDIIISGLPVSARRGR	120			
QY	121	EL	LGPADNFEQGWLLAPITAYSQOTRGLLCIITSLTGRDNQVGEVQVSTATQS	180			
Db	121	EL	LGPADNFEQGWLLAPITAYSQOTRGLLCIITSLTGRDNQVGEVQVSTATQS	180			
QY	181	FL	ATCVNGVCWTVFHAGSKTLAGPKGPIQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSS	240			
Db	181	FL	ATCVNGVCWTVFHAGSKTLAGPKGPIQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSS	240			
QY	241	DLY	LVTRHADVIPRRRGDSRGSLLSPRPVSYLKGSSGGFLLCPSGHAGVIFRAAVCTRG	300			
Db	241	DLY	LVTRHADVIPRRRGDSRGSLLSPRPVSYLKGSSGGFLLCPSGHAGVIFRAAVCTRG	300			
QY	301	VAK	VDPIPVESMETTMTSSAWRHPOFGKKKK	334			
Db	301	VAK	VDPIPVESMETTMTSSAWRHPOFGKKKK	334			

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Db      301 VAKAVDFIPVESMETTMRSSAWRHPQFGGKKK 334

RESULT 2
US-10-017-736C-2
; Sequence 2, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; PRIOR FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-2

Query Match      93.7%; Score 1660; DB 4; Length 409;
Best Local Similarity 100.0%; Pred. No. 3.1e-157;
Matches 315; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      16 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 75
DB      95 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 154
QY      76 LRLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARSARRGRELILGPADNFEQGW 135
DB      155 LRLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARSARRGRELILGPADNFEQGW 214
QY      136 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATQSFILATCVNGVCWTVFH 195
DB      215 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATQSFILATCVNGVCWTVFH 274
QY      196 GAGSKTLAGPKGITOMYTNVDQDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 255
DB      275 GAGSKTLAGPKGITOMYTNVDQDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 334
QY      256 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 315
DB      335 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 394
QY      316 TMRSSAWRHPQFG 330
DB      395 TMRSSAWRHPQFG 409

RESULT 3
US-10-017-736C-10
; Sequence 10, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; PRIOR FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-10

Query Match      89.7%; Score 1589; DB 4; Length 303;
Best Local Similarity 100.0%; Pred. No. 2.5e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      16 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 75
DB      1 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60
QY      76 LRLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARSARRGRELILGPADNFEQGW 135
DB      61 LRLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARSARRGRELILGPADNFEQGW 120
QY      136 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATQSFILATCVNGVCWTVFH 195
DB      121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATQSFILATCVNGVCWTVFH 180
QY      196 GAGSKTLAGPKGITOMYTNVDQDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 255
DB      181 GAGSKTLAGPKGITOMYTNVDQDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 240
QY      256 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 315
DB      241 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 300
QY      316 TMR 318
DB      301 TMR 303

RESULT 4
US-10-017-736C-14
; Sequence 14, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-14

Query Match      89.7%; Score 1589; DB 4; Length 341;
Best Local Similarity 100.0%; Pred. No. 3e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      16 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 75
DB      39 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 98
QY      76 LRLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARSARRGRELILGPADNFEQGW 135
DB      99 LRLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARSARRGRELILGPADNFEQGW 158
QY      136 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATQSFILATCVNGVCWTVFH 195
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Db 159 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCNGVCTVVFH 218.
Qy 196 GAGSKTLAGPKGPIITOMYTNVDQVLGVQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 255
Db 219 GAGSKTLAGPKGPIITOMYTNVDQVLGVQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 278
Qy 256 RRGDSRGLSPRPVSYLKGSSGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
Db 279 RRGDSRGLSPRPVSYLKGSSGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 338
Qy 316 TMR 318
Db 339 TMR 341

RESULT 5

US-10-017-736C-13

; Sequence 13, Application US/10017736C

; Patent No. 6815159

; GENERAL INFORMATION:

; APPLICANT: Thibeault, Diane

; APPLICANT: Lamarre, Daniel

; APPLICANT: Maurice, Roger

; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Armin

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease

; FILE REFERENCE: 13/082

; CURRENT APPLICATION NUMBER: US/10/017,736C

; CURRENT FILING DATE: 2001-12-14

; PRIOR APPLICATION NUMBER: 60/256,031

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 13

; LENGTH: 352

; TYPE: PRT

; ORGANISM: HCV

; US-10-017-736C-13

Query Match 89.7%; Score 1589; DB 4; Length 352;

Best Local Similarity 100.0%; Pred. No. 3.1e-150;

Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALGTYYVDHLTPLQDWAHAG 75
Db 50 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALGTYYVDHLTPLQDWAHAG 109
Qy 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
Db 110 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 169
Qy 136 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCNGVCTVVFH 195
Db 170 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCNGVCTVVFH 229
Qy 196 GAGSKTLAGPKGPIITOMYTNVDQVLGVQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 255
Db 230 GAGSKTLAGPKGPIITOMYTNVDQVLGVQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 289
Qy 256 RRGDSRGLSPRPVSYLKGSSGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
Db 290 RRGDSRGLSPRPVSYLKGSSGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 349
Qy 316 TMR 318
Db 350 TMR 352

RESULT 6

US-10-017-736C-12

; Sequence 12, Application US/10017736C

; Patent No. 6815159

; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736C-12

Query Match 89.7%; Score 1589; DB 4; Length 380;

Best Local Similarity 100.0%; Pred. No. 3.5e-150;

Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALGTYYVDHLTPLQDWAHAG 75
Db 78 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALGTYYVDHLTPLQDWAHAG 137
Qy 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
Db 138 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 197
Qy 136 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCNGVCTVVFH 195
Db 198 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCNGVCTVVFH 257
Qy 196 GAGSKTLAGPKGPIITOMYTNVDQVLGVQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 255
Db 258 GAGSKTLAGPKGPIITOMYTNVDQVLGVQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 317
Qy 256 RRGDSRGLSPRPVSYLKGSSGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
Db 318 RRGDSRGLSPRPVSYLKGSSGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 377
Qy 316 TMR 318
Db 378 TMR 380

RESULT 7

US-10-017-736C-11

; Sequence 11, Application US/10017736C

; Patent No. 6815159

; GENERAL INFORMATION:

; APPLICANT: Thibeault, Diane

; APPLICANT: Lamarre, Daniel

; APPLICANT: Maurice, Roger

; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Armin

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease

; FILE REFERENCE: 13/082

; CURRENT APPLICATION NUMBER: US/10/017,736C

; CURRENT FILING DATE: 2001-12-14

; PRIOR APPLICATION NUMBER: 60/256,031

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 11

; LENGTH: 393

; TYPE: PRT

; ORGANISM: HCV

; US-10-017-736C-11

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Query Match      89.7%; Score 1589; DB 4; Length 393;
Best Local Similarity 100.0%; Pred. No. 3.6e-150; Indels 0; Gaps 0;
Matches 303; Conservative 0; Mismatches 0;

Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYVYDHLTPLQDWAHAG 75
Db 91 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYVYDHLTPLQDWAHAG 150

Qy 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
Db 151 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 210

Qy 136 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATOSFLATCNGVCWTVEH 195
Db 211 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATOSFLATCNGVCWTVEH 270

Qy 196 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255
Db 271 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 330

Qy 256 RRGDSRGSLLSPRPVSYLKGSSGGLLCPSGHVAIGIFRAAAVCTRGVAKAVDFIPVESMET 315
Db 331 RRGDSRGSLLSPRPVSYLKGSSGGLLCPSGHVAIGIFRAAAVCTRGVAKAVDFIPVESMET 390

Qy 316 TMR 318
Db 391 TMR 393

RESULT 8
US-10-017-736C-18
; Sequence 18, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-18

Query Match      89.2%; Score 1580; DB 4; Length 303;
Best Local Similarity 99.7%; Pred. No. 2e-149;
Matches 302; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYVYDHLTPLQDWAHAG 75
Db 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYVYDHLTPLQDWAHAG 60

Qy 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
Db 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120

Qy 136 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATOSFLATCNGVCWTVEH 195
Db 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATOSFLATCNGVCWTVEH 180

Qy 196 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255
Db 181 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240

Qy 256 RRGDSRGSLLSPRPVSYLKGSSGGLLCPSGHVAIGIFRAAAVCTRGVAKAVDFIPVESMET 315
Db 241 RRGDSRGSLLSPRPVSYLKGSSGGLLCPSGHVAIGIFRAAAVCTRGVAKAVDFIPVESMET 300

Qy 316 TMR 318
Db 301 TMR 303

RESULT 10
US-10-017-736C-17
; Sequence 17, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
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; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 301
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-17

Query Match      88.7%; Score 1570; DB 4; Length 301;
Best Local Similarity 99.3%; Pred. No. 1.9e-148;
Matches 301; Conservative 0; Mismatches 0; Indels 2; Gaps 1;

Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 75
Db 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60

Qy 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
Db 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120

Qy 136 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVSTATOSFLATCNGVCWTVFH 195
Db 121 RL--PITAYSQOTRGLGCIITSITGRDKNQVEGEVQVSTATOSFLATCNGVCWTVFH 178

Qy 196 GAGSKTLGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255
Db 179 GAGSKTLGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 238

Qy 256 RRGDSRGSLLSPRPVSYLKSSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
Db 239 RRGDSRGSLLSPRPVSYLKSSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 298

Qy 316 TMR 318
Db 299 TMR 301

RESULT 11
US-10-017-736C-15
; Sequence 15, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibault, Diane
; APPLICANT: Lamarie, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 292
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-15

Query Match      86.5%; Score 1532; DB 4; Length 292;
Best Local Similarity 100.0%; Pred. No. 1.2e-144;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 27 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPV 86
Db 1 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPV 60

Qy 87 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 146
Db 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 120

Qy 147 QTRGLGCIITSITGRDKNQVEGEVQVSTATOSFLATCNGVCWTVFHGAGSKTLGPK 206
Db 121 QTRGLGCIITSITGRDKNQVEGEVQVSTATOSFLATCNGVCWTVFHGAGSKTLGPK 180

Qy 207 GPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRGDSRGSLLS 266
Db 181 GPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRGDSRGSLLS 240

Qy 267 PRPVSYLKSSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 318
Db 241 PRPVSYLKSSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292

RESULT 12
US-09-539-601-6
; Sequence 6, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 6
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-6

Query Match      86.4%; Score 1531; DB 4; Length 2201;
Best Local Similarity 94.7%; Pred. No. 2.7e-143;
Matches 288; Conservative 9; Mismatches 7; Indels 0; Gaps 0;

Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 75
Db 95 AGITKVPYFVRAHGLIRACMLVRKAGHYVQMALMKLAALTGTYYVDHLTPLRDWAHAG 154

Qy 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
Db 155 LRDLAVAVEPVIFSDMETKITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 214

Qy 136 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVSTATOSFLATCNGVCWTVFH 195
Db 215 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVSTATOSFLATCNGVCWTVFH 274

Qy 196 GAGSKTLGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255
Db 275 GAGSKTLGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 334

Qy 256 RRGDSRGSLLSPRPVSYLKSSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
Db 335 RRGDSRGSLLSPRPVSYLKSSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 394

Qy 316 TMR 319
Db 395 TMR 398

RESULT 13
US-09-539-601-15
; Sequence 15, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
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; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System

; FILE REFERENCE: all sequences

; CURRENT APPLICATION NUMBER: US/09/539,601C

; CURRENT FILING DATE: 2001-08-30

; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY

; EARLIER FILING DATE: 1999-04-03

; NUMBER OF SEQ ID NOS: 51

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 15

; LENGTH: 2201

; TYPE: PRN

; ORGANISM: Hepatitis C virus

US-09-539-601-15

Query Match 86.4%; Score 1531; DB 4; Length 2201;

Best Local Similarity 94.7%; Pred. No. 2.7e-143;

Matches 288; Conservative 9; Mismatches 7; Indels 0; Gaps 0;

Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 75

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Qy 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNFEQGW 135

Db 155 LRDLAVAVEPVFSDMETKVIITWGADTAACGDIISGLPVSARRGREILLGPDNFEQGW 214

Qy 136 RLLAPITAYSQOTRGLGCIITSLTGRDNQVEGEVQVWSTATOSFLATCNGVCWTVFH 195

Db 215 RLLAPITAYSQOTRGLGCIITSLTGRDNQVEGEVQVWSTATOSFLATCNGVCWTVYH 274

Qy 196 GAGSKTLAGPKGPIITOMYTNVDQLVGQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255

Db 275 GAGSKTLAGPKGPIITOMYTNVDQLVGQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 334

Qy 256 RRGDSRGSLLSPRPVSVYLGSSGGPPLCPGSHAVGIFRAAAVCTRGVAKAVDFIPVESMET 315

Db 335 RRGDSRGSLLSPRPVSVYLGSSGGPPLCPGSHAVGIFRAAAVCTRGVAKAVDFIPVESMET 394

Qy 316 TMRT 319

Db 395 TMRS 398

RESULT 14

US-10-029-907-3

; Sequence 3, Application US/10029907

; Patent No. 6706874

; GENERAL INFORMATION:

; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.

; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM

; TITLE OF INVENTION: HEPATITIS C VIRUS

; FILE REFERENCE: 13/083

; CURRENT APPLICATION NUMBER: US/10/029,907

; CURRENT FILING DATE: 2001-12-21

; PRIOR APPLICATION NUMBER: 60/257,857

; PRIOR FILING DATE: 2000-12-22

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 3

; LENGTH: 2201

; TYPE: PRN

; ORGANISM: HCV

; FEATURE:

; NAME/KEY: VARIANT

; LOCATION: 882

; OTHER INFORMATION: Xaa is Lys or Arg

; NAME/KEY: VARIANT

; LOCATION: 1489

; OTHER INFORMATION: Xaa is Leu

US-10-029-907-3

Query Match 86.4%; Score 1531; DB 4; Length 2201;

Best Local Similarity 94.7%; Pred. No. 2.7e-143;

Matches 288; Conservative 9; Mismatches 7; Indels 0; Gaps 0;

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Db 95 AGITKVPYFVRAHGLIRACMLVRKVAGHYVQMAFMKLAALTGTYYVDHLTPLRDWAHAG 154

Qy 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNFEQGW 135

Db 155 LRDLAVAVEPVFSDMETKVIITWGADTAACGDIISGLPVSARRGREILLGPDNFEQGW 214

Qy 136 RLLAPITAYSQOTRGLGCIITSLTGRDNQVEGEVQVWSTATOSFLATCNGVCWTVFH 195

Db 215 RLLAPITAYSQOTRGLGCIITSLTGRDNQVEGEVQVWSTATOSFLATCNGVCWTVYH 274

Qy 196 GAGSKTLAGPKGPIITOMYTNVDQLVGQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255

Db 275 GAGSKTLAGPKGPIITOMYTNVDQLVGQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 334

Qy 256 RRGDSRGSLLSPRPVSVYLGSSGGPPLCPGSHAVGIFRAAAVCTRGVAKAVDFIPVESMET 315

Db 335 RRGDSRGSLLSPRPVSVYLGSSGGPPLCPGSHAVGIFRAAAVCTRGVAKAVDFIPVESMET 394

Qy 316 TMRT 319

Db 395 TMRS 398

RESULT 15

US-09-539-601-3

; Sequence 3, Application US/09539601C

; Patent No. 6630343

; GENERAL INFORMATION:

; APPLICANT: Bartschlagel, Ralf FW

; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System

; FILE REFERENCE: all sequences

; CURRENT APPLICATION NUMBER: US/09/539,601C

; CURRENT FILING DATE: 2001-08-30

; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY

; EARLIER FILING DATE: 1999-04-03

; NUMBER OF SEQ ID NOS: 51

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 3

; LENGTH: 3010

; TYPE: PRN

; ORGANISM: Hepatitis C virus

US-09-539-601-3

Query Match 86.4%; Score 1531; DB 4; Length 3010;

Best Local Similarity 94.7%; Pred. No. 4.3e-143;

Matches 288; Conservative 9; Mismatches 7; Indels 0; Gaps 0;

Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 75

Db 904 AGITKVPYFVRAHGLIRACMLVRKVAGHYVQMAFMKLAALTGTYYVDHLTPLRDWAHAG 963

Qy 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNFEQGW 135

Db 964 LRDLAVAVEPVFSDMETKVIITWGADTAACGDIISGLPVSARRGREILLGPDNFEQGW 1023

Qy 136 RLLAPITAYSQOTRGLGCIITSLTGRDNQVEGEVQVWSTATOSFLATCNGVCWTVFH 195

Db 1024 RLLAPITAYSQOTRGLGCIITSLTGRDNQVEGEVQVWSTATOSFLATCNGVCWTVYH 1083

Qy 196 GAGSKTLAGPKGPIITOMYTNVDQLVGQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255

Db 1084 GAGSKTLAGPKGPIITOMYTNVDQLVGQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 1143

Qy 256 RRGDSRGSLLSPRPVSVYLGSSGGPPLCPGSHAVGIFRAAAVCTRGVAKAVDFIPVESMET 315

Db 1144 RRGDSRGSLLSPRPVSVYLGSSGGPPLCPGSHAVGIFRAAAVCTRGVAKAVDFIPVESMET 1203

Qy 316 TMRT 319

Db 395 TMRS 398

Db 1204 TMRS 1207

Search completed: May 26, 2005, 22:03:37
Job time : 21.3846 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 26, 2005, 21:58:09 ; Search time 58.1537 Seconds
(without alignments)
1981.317 Million cell updates/sec

Title: US-10-650-585-4
Perfect score: 1771
Sequence: 1 MKKKLEHHHHHTSAGITK.....TTMTSSAWRHPOGGKKKK 334

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1462099 seqs, 344972447 residues

Total number of hits satisfying chosen parameters: 1462099

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:*

- 1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
- 2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
- 3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
- 4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
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- 11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
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- 14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
- 15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
- 16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
- 17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
- 18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
- 19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
- 20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1771	100.0	334	13	US-10-017-736-4
2	1771	100.0	334	15	US-10-650-585-4
3	1660	93.7	409	13	US-10-017-736-2
4	1660	93.7	409	15	US-10-650-585-2
5	1589	89.7	303	13	US-10-017-736-10
6	1589	89.7	303	15	US-10-650-585-10
7	1589	89.7	341	13	US-10-017-736-14
8	1589	89.7	341	15	US-10-650-585-14
9	1589	89.7	352	13	US-10-017-736-13
10	1589	89.7	352	15	US-10-650-585-13
11	1589	89.7	380	13	US-10-017-736-12
12	1589	89.7	380	15	US-10-650-585-12
13	1589	89.7	393	13	US-10-017-736-11

14	1589	89.7	393	15	US-10-650-585-11	Sequence 11, Appl
15	1580	89.2	303	13	US-10-017-736-18	Sequence 18, Appl
16	1580	89.2	303	15	US-10-650-585-18	Sequence 18, Appl
17	1579	89.2	303	13	US-10-017-736-16	Sequence 16, Appl
18	1579	89.2	303	15	US-10-650-585-16	Sequence 16, Appl
19	1570	88.7	301	13	US-10-017-736-17	Sequence 17, Appl
20	1570	88.7	301	15	US-10-650-585-17	Sequence 17, Appl
21	1532	86.5	292	13	US-10-017-736-15	Sequence 15, Appl
22	1532	86.5	292	15	US-10-650-585-15	Sequence 15, Appl
23	1531	86.4	2201	13	US-10-029-907-3	Sequence 3, Appli
24	1531	86.4	2201	14	US-10-309-561-3	Sequence 3, Appli
25	1531	86.4	2201	16	US-10-789-355-3	Sequence 3, Appli
26	1531	86.4	3010	15	US-10-467-000-1	Sequence 1, Appli
27	1531	86.4	3010	16	US-10-333-449A-34	Sequence 34, Appl
28	1528	86.3	1692	10	US-09-919-901-4	Sequence 4, Appli
29	1528	86.3	1692	14	US-10-191-966-4	Sequence 4, Appli
30	1528	86.3	2307	10	US-09-919-901-2	Sequence 2, Appli
31	1528	86.3	2307	14	US-10-191-966-2	Sequence 2, Appli
32	1525	86.1	1692	10	US-09-919-901-11	Sequence 11, Appl
33	1525	86.1	1692	14	US-10-191-966-11	Sequence 11, Appl
34	1525	86.1	2307	10	US-09-919-901-9	Sequence 9, Appli
35	1525	86.1	2307	14	US-10-191-966-9	Sequence 9, Appli
36	1516	85.6	1692	10	US-09-919-901-18	Sequence 18, Appl
37	1516	85.6	1692	14	US-10-191-966-18	Sequence 18, Appl
38	1516	85.6	2307	10	US-09-919-901-16	Sequence 16, Appl
39	1516	85.6	2307	14	US-10-191-966-16	Sequence 16, Appl
40	1479	83.5	2201	13	US-10-085-476-2	Sequence 2, Appli
41	1406	79.4	3011	9	US-09-742-659-4	Sequence 4, Appli
42	1406	79.4	3011	10	US-09-891-894-3	Sequence 3, Appli
43	1406	79.4	3011	14	US-10-184-150-3	Sequence 3, Appli
44	1406	79.4	3011	15	US-10-328-997-3	Sequence 3, Appli
45	1406	79.4	3012	9	US-09-238-076-2	Sequence 2, Appli

ALIGNMENTS

RESULT 1
US-10-017-736-4
; Sequence 4, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736-4

Query Match	100.0%	Score 1771;	DB 13;	Length 334;
Best Local Similarity	100.0%	Pred. No. 5.9e-158;		
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Db	1	MKKKLEHHHHHTSAGITKVPYFVRAOGLIRACMLVRKAAGGHYQVAFMKLAALTCY	60	
Qy	61	VYDHLTFLQDWAHAGLRDLAVAVEPVI FSDMEVKIITWGDATACGDIISGLPVSARRGR	120	
Db	61	VYDHLTFLQDWAHAGLRDLAVAVEPVI FSDMEVKIITWGDATACGDIISGLPVSARRGR	120	
Qy	121	EILGLPADNFEQGWRLAPITAYSQQTRGLGCIITSLTGRDKNQVEGEVQVWSTATQS	180	
Db	121	EILGLPADNFEQGWRLAPITAYSQQTRGLGCIITSLTGRDKNQVEGEVQVWSTATQS	180	

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Db 181 FLATCVNGVCTVPHGAGSKTLGPKGPIQMTYNTVDQDLVGVQAPPGARSMTPTCTGSS 240
Qy 241 DLYLVTRHADVIPVRRRGDSRGLSPVSYLKGSGGPIILCPSGHAGVIFRAAVCTRG 300
Db 241 DLYLVTRHADVIPVRRRGDSRGLSPVSYLKGSGGPIILCPSGHAGVIFRAAVCTRG 300
Qy 301 VAKAVDFIPVESMETTMRSSAWRHPQFGKKK 334
Db 301 VAKAVDFIPVESMETTMRSSAWRHPQFGKKK 334
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RESULT 2

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US-10-650-585-4
; Sequence 4, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-4
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Best Local Similarity 100.0%; Pred. No. 5.9e-158;
Matches 334; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 121 EILGPGADNPFEGQWRLLAPITAYSQOTRGLLGCIIITSLTGRDKNOVEGEVQVSTATQS 180
Qy 181 FLATCVNGVCTVPHGAGSKTLGPKGPIQMTYNTVDQDLVGVQAPPGARSMTPTCTGSS 240
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Qy 241 DLYLVTRHADVIPVRRRGDSRGLSPVSYLKGSGGPIILCPSGHAGVIFRAAVCTRG 300
Db 241 DLYLVTRHADVIPVRRRGDSRGLSPVSYLKGSGGPIILCPSGHAGVIFRAAVCTRG 300
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Db 301 VAKAVDFIPVESMETTMRSSAWRHPQFGKKK 334
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RESULT 3

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US-10-017-736-2
; Sequence 2, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
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; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-2
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Best Local Similarity 100.0%; Pred. No. 2.1e-147;
Matches 315; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 95 AGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGYVYDHLTPLODWAHAG 154
Qy 76 LRDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGW 135
Db 155 LRDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGW 214
Qy 136 RLLAPITAYSQOTRGLLGCIIITSLTGRDKNOVEGEVQVSTATQSFLATCVNGVCTVPH 195
Db 215 RLLAPITAYSQOTRGLLGCIIITSLTGRDKNOVEGEVQVSTATQSFLATCVNGVCTVPH 274
Qy 196 GAGSKTLGPKGPIQMTYNTVDQDLVGVQAPPGARSMTPTCTGSSDLYLVTRHADVIPVR 255
Db 275 GAGSKTLGPKGPIQMTYNTVDQDLVGVQAPPGARSMTPTCTGSSDLYLVTRHADVIPVR 334
Qy 256 RRGDSRGLSPVSYLKGSGGPIILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 315
Db 335 RRGDSRGLSPVSYLKGSGGPIILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 394
Qy 316 TMRSSAWRHPQFGG 330
Db 395 TMRSSAWRHPQFGG 409
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RESULT 4

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US-10-650-585-2
; Sequence 2, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-2
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Query Match 93.7%; Score 1660; DB 15; Length 409;
Best Local Similarity 100.0%; Pred. No. 2.1e-147;
Matches 315; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 16 AGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGYVYDHLTPLODWAHAG 75
Db 95 AGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGYVYDHLTPLODWAHAG 154
Qy 76 LRDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGW 135
Db 155 LRDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGW 214
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RESULT 6
US-10-650-585-10
; Sequence 10, Application US/10650585
; Publication No. US2004007066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.

	Query Match	89.7%	Score 1589;	DB 13;	Length 341;
	Best Local Similarity	100.0%;	Pred. No.	8e-141;	
	Matches 303;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	16 AGTTKVPYFVRAOGLTRACMLVRKAAGGHVVQAFMKLAALTGTTYVDHLLPLQDWAHAG	75			
Dd	39 AGITKTVPYFVRAOGLTRACMLVRKAAGGHVVQAFMKLAALTGTTYVDHLLPLQDWAHAG	98			

Qy	16	AGITKVPFVRAQGLIRACMLVRKAAGHYQMAFMKLAALTGTYYVDHLTFLQDWAHAG	75
Db	50	AGITKVPFVRAQGLIRACMLVRKAAGHYQMAFMKLAALTGTYYVDHLTFLQDWAHAG	109
Qy	76	LRDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGM	135
Db	110	LRDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGM	169
Qy	136	RLLPITAYSQOTRGLLGCIITSLGRDKNOVEGEVQVSTATQSFATCVNGVCMTVFH	195
Db	170	RLLPITAYSQOTRGLLGCIITSLGRDKNOVEGEVQVSTATQSFATCVNGVCMTVFH	229
Qy	196	GAGSKTLGAPKGPITOMYTNVDQDLVGWAQPGARSMTPECTGSSDLYLVLTRHADVIPVR	255
Db	230	GAGSKTLGAPKGPITOMYTNVDQDLVGWAQPGARSMTPECTGSSDLYLVLTRHADVIPVR	289
Qy	256	RRGDSRGLSPRPVSYLKGSGGPLLCPSHGAVGIFRAAVCTRGVAKAAMDPIPVESMET	315
Db	290	RRGDSRGLSPRPVSYLKGSGGPLLCPSHGAVGIFRAAVCTRGVAKAAMDPIPVESMET	349
Qy	316	TMR	318
Db	350	TMR	352

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RESULT 11
US-10-017-736-12
; Sequence 12, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-12

Query Match      89.7%; Score 1589; DB 13; Length 380;
Best Local Similarity 100.0%; Pred. No. 9, 2e-141;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 12
US-10-650-585-12
; Sequence 12, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: Prt
; ORGANISM: HCV
US-10-650-585-12

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RESULT 13
US-10-017-736-11
; Sequence 11, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-11

```

Query Match 89.7%; Score 1589; DB 13; Length 393;
Best Local Similarity 100.0%; Pred. No. 9.6e-141;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQVAFMKLAALTCGYVVDHLTPLODWAHAG 75
DB 91 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQVAFMKLAALTCGYVVDHLTPLODWAHAG 150

QY 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
DB 151 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 210

QY 136 RLLAPITAYSQOQTRGLLGCIITSLTGRDKNOVEGEVQVSTATQSFATCVCNGVCTVVFH 195
DB 211 RLLAPITAYSQOQTRGLLGCIITSLTGRDKNOVEGEVQVSTATQSFATCVCNGVCTVVFH 270

QY 196 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPARGSMTPCTCGSSDLYLVTRHADVIPVR 255
DB 271 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPARGSMTPCTCGSSDLYLVTRHADVIPVR 330

QY 256 RRGDSRGSLLSPRPVSYLKSGSGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 315
DB 331 RRGDSRGSLLSPRPVSYLKSGSGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 390

QY 316 TMR 318
DB 391 TMR 393

RESULT 14
US-10-650-585-11
; Sequence 11, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-11

Query Match 89.7%; Score 1589; DB 15; Length 393;
Best Local Similarity 100.0%; Pred. No. 9.6e-141;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQVAFMKLAALTCGYVVDHLTPLODWAHAG 75
DB 91 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQVAFMKLAALTCGYVVDHLTPLODWAHAG 150

QY 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
DB 151 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 210

QY 136 RLLAPITAYSQOQTRGLLGCIITSLTGRDKNOVEGEVQVSTATQSFATCVCNGVCTVVFH 195
DB 211 RLLAPITAYSQOQTRGLLGCIITSLTGRDKNOVEGEVQVSTATQSFATCVCNGVCTVVFH 270

QY 196 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPARGSMTPCTCGSSDLYLVTRHADVIPVR 255
DB 271 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPARGSMTPCTCGSSDLYLVTRHADVIPVR 330

QY 256 RRGDSRGSLLSPRPVSYLKSGSGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 315

DB 331 RRGDSRGSLLSPRPVSYLKSGSGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 390

QY 316 TMR 318
DB 391 TMR 393

RESULT 15
US-10-017-736-18
; Sequence 18, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-18

Query Match 89.2%; Score 1580; DB 13; Length 303;
Best Local Similarity 99.7%; Pred. No. 4.8e-140;
Matches 302; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQVAFMKLAALTCGYVVDHLTPLODWAHAG 75
DB 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQVAFMKLAALTCGYVVDHLTPLODWAHAG 60

QY 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
DB 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120

QY 136 RLLAPITAYSQOQTRGLLGCIITSLTGRDKNOVEGEVQVSTATQSFATCVCNGVCTVVFH 195
DB 121 RLLAPITAYSQOQTRGLLGCIITSLTGRDKNOVEGEVQVSTATQSFATCVCNGVCTVVFH 180

QY 196 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPARGSMTPCTCGSSDLYLVTRHADVIPVR 255
DB 181 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPARGSMTPCTCGSSDLYLVTRHADVIPVR 240

QY 256 RRGDSRGSLLSPRPVSYLKSGSGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 315
DB 241 RRGDSRGSLLSPRPVSYLKSGSGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 300

QY 316 TMR 318
DB 301 TMR 303

Search completed: May 26, 2005, 22:42:56
Job time : 72.2965 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 26, 2005, 21:44:29 ; Search time 17.5854 Seconds
(without alignments)
1286.219 Million cell updates/sec

Title: us-10-650-585-10

Perfect score: 1589

Sequence: 1 AGITKPYFVRAOGLIRACM.....RGVAKAVDFIPVSMETMR 303

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*

1: /cgn2_6/ptodata/1/iaa/5A COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PTCUS COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1589	100.0	303	4	US-10-017-736C-10
2	1589	100.0	334	4	US-10-017-736C-4
3	1589	100.0	341	4	US-10-017-736C-14
4	1589	100.0	352	4	US-10-017-736C-13
5	1589	100.0	380	4	US-10-017-736C-12
6	1589	100.0	393	4	US-10-017-736C-11
7	1589	100.0	409	4	US-10-017-736C-2
8	1580	99.4	303	4	US-10-017-736C-18
9	1579	99.4	303	4	US-10-017-736C-16
10	1570	98.8	301	4	US-10-017-736C-17
11	1532	96.3	292	4	US-10-017-736C-15
12	1530	96.3	2201	4	US-09-539-601-6
13	1530	96.3	2201	4	US-09-539-601-15
14	1530	96.3	2201	4	US-10-029-907-3
15	1530	96.3	3010	4	US-09-539-601-3
16	1530	96.3	3010	4	US-09-539-601-21
17	1530	96.3	3010	4	US-09-539-601-27
18	1527	96.1	1692	3	US-09-263-933-4
19	1527	96.1	1692	4	US-09-919-901-4
20	1527	96.1	1692	4	US-10-191-966-4
21	1527	96.1	2307	3	US-09-263-933-2
22	1527	96.1	2307	4	US-09-919-901-2
23	1527	96.1	2307	4	US-10-191-966-2
24	1524	95.9	1692	3	US-09-263-933-11
25	1524	95.9	1692	4	US-09-919-901-11
26	1524	95.9	1692	4	US-10-191-966-11
27	1524	95.9	2307	3	US-09-263-933-9

28	1524	95.9	2307	4	US-09-919-901-9	Sequence 9, Appli
29	1524	95.9	2307	4	US-10-191-966-9	Sequence 9, Appli
30	1523	95.8	3010	4	US-09-539-601-33	Sequence 33, Appl
31	1515	95.3	1692	3	US-09-263-933-18	Sequence 18, Appl
32	1515	95.3	1692	4	US-09-919-901-18	Sequence 18, Appl
33	1515	95.3	1692	4	US-10-191-966-18	Sequence 18, Appl
34	1515	95.3	2307	3	US-09-263-933-16	Sequence 16, Appl
35	1515	95.3	2307	4	US-09-919-901-16	Sequence 16, Appl
36	1515	95.3	2307	4	US-10-191-966-16	Sequence 16, Appl
37	1504	94.7	3010	3	US-09-014-416-3	Sequence 3, Appli
38	1478	93.0	2013	1	US-08-324-977-12	Sequence 12, Appl
39	1478	93.0	2013	2	US-08-384-616-12	Sequence 12, Appl
40	1478	93.0	2013	2	US-08-904-686A-12	Sequence 12, Appl
41	1478	93.0	2013	3	US-09-315-850-12	Sequence 12, Appl
42	1478	93.0	2201	3	US-08-952-981A-2	Sequence 2, Appli
43	1478	93.0	2620	1	US-08-324-977-32	Sequence 32, Appl
44	1478	93.0	2620	2	US-08-384-616-32	Sequence 32, Appl
45	1478	93.0	2620	2	US-08-904-686A-32	Sequence 32, Appl

ALIGNMENTS

RESULT 1

US-10-017-736C-10

; Sequence 10, Application US/10017736C

; Patent No. 6815159

; GENERAL INFORMATION:

; APPLICANT: Thibault, Diane

; APPLICANT: Lamaire, Daniel

; APPLICANT: Maurice, Roger

; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Armin

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease

; FILE REFERENCE: 13/082

; CURRENT APPLICATION NUMBER: US/10/017,736C

; CURRENT FILING DATE: 2001-12-14

; PRIOR APPLICATION NUMBER: 60/256,031

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 10

; LENGTH: 303

; TYPE: PRT

; ORGANISM: HCV

; US-10-017-736C-10

Query Match 100.0%; Score 1589; DB 4; Length 303;

Best Local Similarity 100.0%; Pred. No. 2.3e-151;

Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGITKPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTVYVDHLTPLQDWAHAG 60

Db 1 AGITKPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTVYVDHLTPLQDWAHAG 60

QY 61 LRLDAVAVPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120

Db 61 LRLDAVAVPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120

QY 121 RLLAPITAYSQOQTRGLLGCIIITSLTGRDKNQVEGEVQVNSTATQSLATCVNGVCWTVFH 180

Db 121 RLLAPITAYSQOQTRGLLGCIIITSLTGRDKNQVEGEVQVNSTATQSLATCVNGVCWTVFH 180

QY 181 GAGSKTLAGPKGIPITOMYTNNVDOLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVLPVR 240

Db 181 GAGSKTLAGPKGIPITOMYTNNVDOLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVLPVR 240

QY 241 RRGDSRGSLLSPRPVSVYLGSGGPGLLCPSGHVGIFRAAIVCTRGVAKAVDFIPVSMET 300

Db 241 RRGDSRGSLLSPRPVSVYLGSGGPGLLCPSGHVGIFRAAIVCTRGVAKAVDFIPVSMET 300

QY 301 TMR 303

|||

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Db          301 TMR 303

RESULT 2
US-10-017-736C-4
; Sequence 4, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-4

Query Match          100.0%; Score 1589; DB 4; Length 334;
Best Local Similarity 100.0%; Pred. No. 2.6e-151;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Yy          1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60
Db          16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 75
Yy          61 LRDLAVAVEPVIFSDMEVKIITWGADTAACDIIISGLPVSARRGREILLGPADNFEQGW 120
Db          76 LRDLAVAVEPVIFSDMEVKIITWGADTAACDIIISGLPVSARRGREILLGPADNFEQGW 135
Yy          121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATQSFATCNGVCWTVEH 180
Db          136 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATQSFATCNGVCWTVEH 195
Yy          181 GAGSKTLGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db          196 GAGSKTLGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255
Yy          241 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 300
Db          256 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 315
Yy          301 TMR 303
Db          316 TMR 318

RESULT 3
US-10-017-736C-14
; Sequence 14, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-13

Query Match          100.0%; Score 1589; DB 4; Length 352;
Best Local Similarity 100.0%; Pred. No. 2.8e-151;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Yy          1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60
Db          50 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 109
Yy          61 LRDLAVAVEPVIFSDMEVKIITWGADTAACDIIISGLPVSARRGREILLGPADNFEQGW 120
Db          110 LRDLAVAVEPVIFSDMEVKIITWGADTAACDIIISGLPVSARRGREILLGPADNFEQGW 169
Yy          121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATQSFATCNGVCWTVEH 180
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Db 170 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATOSFLATCNGVCWTVFH 229
Qy 181 GAGSKTLAGPKGPITQMTYTNVDQLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 230 GAGSKTLAGPKGPITQMTYTNVDQLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 289
Qy 241 RRGDSRGLSPRPVSVYKSGSGGPLLCPSGHAGVGFRAAVCTRGVAKAVDFIPVESMET 300
Db 290 RRGDSRGLSPRPVSVYKSGSGGPLLCPSGHAGVGFRAAVCTRGVAKAVDFIPVESMET 349
Qy 301 TMR 303
Db 350 TMR 352

RESULT 5

US-10-017-736C-12

; Sequence 12, Application US/10017736C

; Patent No. 6815159

; GENERAL INFORMATION:

; APPLICANT: Thibeault, Diane

; APPLICANT: Lamarre, Daniel

; APPLICANT: Maurice, Roger

; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Amin

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease

; FILE REFERENCE: 13/082

; CURRENT APPLICATION NUMBER: US/10/017,736C

; CURRENT FILING DATE: 2001-12-14

; PRIOR APPLICATION NUMBER: 60/256,031

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 12

; LENGTH: 380

; TYPE: PRT

; ORGANISM: HCV

US-10-017-736C-12

Query Match 100.0%; Score 1589; DB 4; Length 380;
Best Local Similarity 100.0%; Pred. No. 3.1e-151;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
Db 78 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 137
Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 138 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 197
Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATOSFLATCNGVCWTVFH 180
Db 198 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATOSFLATCNGVCWTVFH 257
Qy 181 GAGSKTLAGPKGPITQMTYTNVDQLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 258 GAGSKTLAGPKGPITQMTYTNVDQLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 317
Qy 241 RRGDSRGLSPRPVSVYKSGSGGPLLCPSGHAGVGFRAAVCTRGVAKAVDFIPVESMET 300
Db 318 RRGDSRGLSPRPVSVYKSGSGGPLLCPSGHAGVGFRAAVCTRGVAKAVDFIPVESMET 377
Qy 301 TMR 303
Db 378 TMR 380

RESULT 6

US-10-017-736C-11

; Sequence 11, Application US/10017736C

; Patent No. 6815159

; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Amin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-11

Query Match 100.0%; Score 1589; DB 4; Length 393;
Best Local Similarity 100.0%; Pred. No. 3.3e-151;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
Db 91 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 150
Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 151 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 210
Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATOSFLATCNGVCWTVFH 180
Db 211 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATOSFLATCNGVCWTVFH 270
Qy 181 GAGSKTLAGPKGPITQMTYTNVDQLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 271 GAGSKTLAGPKGPITQMTYTNVDQLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 330
Qy 241 RRGDSRGLSPRPVSVYKSGSGGPLLCPSGHAGVGFRAAVCTRGVAKAVDFIPVESMET 300
Db 331 RRGDSRGLSPRPVSVYKSGSGGPLLCPSGHAGVGFRAAVCTRGVAKAVDFIPVESMET 390
Qy 301 TMR 303
Db 391 TMR 393

RESULT 7

US-10-017-736C-2

; Sequence 2, Application US/10017736C

; Patent No. 6815159

; GENERAL INFORMATION:

; APPLICANT: Thibeault, Diane

; APPLICANT: Lamarre, Daniel

; APPLICANT: Maurice, Roger

; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Amin

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease

; FILE REFERENCE: 13/082

; CURRENT APPLICATION NUMBER: US/10/017,736C

; CURRENT FILING DATE: 2001-12-14

; PRIOR APPLICATION NUMBER: 60/256,031

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 2

; LENGTH: 409

; TYPE: PRT

; ORGANISM: HCV

US-10-017-736C-2

```
Query Match      100.0%; Score 1589; DB 4; Length 409;
Best Local Similarity 100.0%; Pred. No. 3.5e-151;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
Db 95 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 154

Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 155 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 214

Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVWSTATOSFLATCNGVCWTVFH 180
Db 215 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVWSTATOSFLATCNGVCWTVFH 274

Qy 181 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 275 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 334

Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMET 300
Db 335 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMET 394

Qy 301 TMR 303
Db 395 TMR 397

RESULT 8
US-10-017-736C-18
; Sequence 18, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-18

Query Match      99.4%; Score 1580; DB 4; Length 303;
Best Local Similarity 99.7%; Pred. No. 1.8e-150;
Matches 302; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
Db 1 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60

Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120

Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVWSTATOSFLATCNGVCWTVFH 180
Db 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVWSTATOSFLATCNGVCWTVFH 180

Qy 181 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 181 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240

Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMET 300
Db 241 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMET 300

Qy 301 TMR 303
Db 301 TMR 303

RESULT 10
US-10-017-736C-17
; Sequence 17, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-17

Query Match      99.4%; Score 1579; DB 4; Length 303;
Best Local Similarity 99.7%; Pred. No. 2.3e-150;
Matches 302; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
Db 1 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60

Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120

Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVWSTATOSFLATCNGVCWTVFH 180
Db 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVWSTATOSFLATCNGVCWTVFH 180

Qy 181 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 181 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240

Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMET 300
Db 241 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMET 300

Qy 301 TMR 303
Db 301 TMR 303

RESULT 9
US-10-017-736C-16
; Sequence 16, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-16

Query Match      99.4%; Score 1579; DB 4; Length 303;
Best Local Similarity 99.7%; Pred. No. 2.3e-150;
Matches 302; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
Db 1 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60

Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120

Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVWSTATOSFLATCNGVCWTVFH 180
Db 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVWSTATOSFLATCNGVCWTVFH 180

Qy 181 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 181 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240

Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMET 300
Db 241 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMET 300

Qy 301 TMR 303
Db 301 TMR 303
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; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 301
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-17

Query Match
Best Local Similarity 98.8%; Score 1570; DB 4; Length 301;
Matches 301; Conservative 0; Mismatches 0; Indels 2; Gaps 1;

QY 1 AGITKVPYFVRAOGLIRACMLVRKAAGHHYVQAFMKLAALTGTYVYDHLTPLODWAHAG 60
Db 1 AGITKVPYFVRAOGLIRACMLVRKAAGHHYVQAFMKLAALTGTYVYDHLTPLODWAHAG 60
QY 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNPFEGQGW 120
Db 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNPFEGQGW 120
QY 121 RLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTATOSFLATCNGVCWTVFH 180
Db 121 RL--PITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTATOSFLATCNGVCWTVFH 178
QY 181 GAGSKTLAGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 179 GAGSKTLAGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 238
QY 241 RRGDSRGSLLSPRPVSYLKSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db 239 RRGDSRGSLLSPRPVSYLKSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 298
QY 301 TMR 303
Db 299 TMR 301

RESULT 11
US-10-017-736C-15
; Sequence 15, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 292
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-15

Query Match
Best Local Similarity 96.4%; Score 1532; DB 4; Length 292;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 12 AOGLIRACMLVRKAAGHHYVQAFMKLAALTGTYVYDHLTPLODWAHAGRLDLAVAVEPV 71
Db 1 AOGLIRACMLVRKAAGHHYVQAFMKLAALTGTYVYDHLTPLODWAHAGRLDLAVAVEPV 60

; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 301
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-17

Query Match
Best Local Similarity 99.3%; Pred. No. 1.8e-149;
Matches 301; Conservative 0; Mismatches 0; Indels 2; Gaps 1;

QY 1 AGITKVPYFVRAOGLIRACMLVRKAAGHHYVQAFMKLAALTGTYVYDHLTPLODWAHAG 60
Db 1 AGITKVPYFVRAOGLIRACMLVRKAAGHHYVQAFMKLAALTGTYVYDHLTPLODWAHAG 60
QY 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNPFEGQGW 120
Db 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNPFEGQGW 120
QY 121 RLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTATOSFLATCNGVCWTVFH 180
Db 121 RL--PITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTATOSFLATCNGVCWTVFH 178
QY 181 GAGSKTLAGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 179 GAGSKTLAGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 238
QY 241 RRGDSRGSLLSPRPVSYLKSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db 239 RRGDSRGSLLSPRPVSYLKSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 298
QY 301 TMR 303
Db 299 TMR 301

RESULT 12
US-09-539-601-6
; Sequence 6, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartschlagher, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 6
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-6

Query Match
Best Local Similarity 96.3%; Score 1530; DB 4; Length 2201;
Matches 288; Conservative 8; Mismatches 7; Indels 0; Gaps 0;

QY 1 AGITKVPYFVRAOGLIRACMLVRKAAGHHYVQAFMKLAALTGTYVYDHLTPLODWAHAG 60
Db 95 AGITKVPYFVRAOGLIRACMLVRKAAGHHYVQAFMKLAALTGTYVYDHLTPLODWAHAG 154
QY 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNPFEGQGW 120
Db 155 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNPFEGQGW 214
QY 121 RLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTATOSFLATCNGVCWTVFH 180
Db 215 RLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTATOSFLATCNGVCWTVFH 274
QY 181 GAGSKTLAGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 275 GAGSKTLAGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 334
QY 241 RRGDSRGSLLSPRPVSYLKSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db 335 RRGDSRGSLLSPRPVSYLKSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 394
QY 301 TMR 303
Db 395 TMR 397

RESULT 13
US-09-539-601-15
; Sequence 15, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartschlagher, Ralf FW
```

```

; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 15
; LENGTH: 2201
; TYPE: PR1
; ORGANISM: Hepatitis C virus
US-09-539-601-15

Query Match          96.3%; Score 1530; DB 4; Length 2201;
Best Local Similarity 95.0%; Pred. No. 3.3e-144;
Matches 288; Conservative 8; Mismatches 7; Indels 0; Gaps 0;

QY 1 AGITKVPYFVRAOGLIRACMLVRKAAGGHVQVMAFMKLAALTCTYYVDHLTPLODWAHAG 60
DB 95 AGITKVPYFVRAHGLIRACMLVRKAGGHVQVQALMKLAALTCTYYVDHLTPLODWAHAG 154
QY 61 LRD LAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRGREIHLGPADNFEQGW 120
DB 155 LRD LAVAVEPVFSDMETKVIITWGADTAACGDIISGLPVSARRGREIHLGPADNFEQGW 214
QY 121 RLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTATQSFATCVCNVCWTVFH 180
DB 215 RLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTATQSFATCVCNVCWTVYH 274
QY 181 GAGSKTLAGPKGPIITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
DB 275 GAGSKTLAGPKGPIITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 334
QY 241 RRGDSRGSLLSPRPVSYLKSGSGPILLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
DB 335 RRGDSRGSLLSPRPVSYLKSGSGPILLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 394
QY 301 TMR 303
DB 395 TMR 397

RESULT 15
US-09-539-601-3
; Sequence 3, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartschlagler, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 3
; LENGTH: 3010
; TYPE: PR1
; ORGANISM: Hepatitis C virus
US-09-539-601-3

Query Match          96.3%; Score 1530; DB 4; Length 3010;
Best Local Similarity 95.0%; Pred. No. 5.2e-144;
Matches 288; Conservative 8; Mismatches 7; Indels 0; Gaps 0;

QY 1 AGITKVPYFVRAOGLIRACMLVRKAAGGHVQVMAFMKLAALTCTYYVDHLTPLODWAHAG 60
DB 904 AGITKVPYFVRAHGLIRACMLVRKAGGHVQVQALMKLAALTCTYYVDHLTPLODWAHAG 963
QY 61 LRD LAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRGREIHLGPADNFEQGW 120
DB 964 LRD LAVAVEPVFSDMETKVIITWGADTAACGDIISGLPVSARRGREIHLGPADNFEQGW 1023
QY 121 RLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTATQSFATCVCNVCWTVFH 180
DB 1024 RLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTATQSFATCVCNVCWTVYH 1083
QY 181 GAGSKTLAGPKGPIITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
DB 1084 GAGSKTLAGPKGPIITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 1143
QY 241 RRGDSRGSLLSPRPVSYLKSGSGPILLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
DB 1144 RRGDSRGSLLSPRPVSYLKSGSGPILLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 1203
QY 301 TMR 303
DB 395 TMR 397

; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 15
; LENGTH: 2201
; TYPE: PR1
; ORGANISM: Hepatitis C virus
US-09-539-601-15

Query Match          96.3%; Score 1530; DB 4; Length 2201;
Best Local Similarity 95.0%; Pred. No. 3.3e-144;
Matches 288; Conservative 8; Mismatches 7; Indels 0; Gaps 0;

QY 1 AGITKVPYFVRAOGLIRACMLVRKAAGGHVQVMAFMKLAALTCTYYVDHLTPLODWAHAG 60
DB 95 AGITKVPYFVRAHGLIRACMLVRKAGGHVQVQALMKLAALTCTYYVDHLTPLODWAHAG 154
QY 61 LRD LAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRGREIHLGPADNFEQGW 120
DB 155 LRD LAVAVEPVFSDMETKVIITWGADTAACGDIISGLPVSARRGREIHLGPADNFEQGW 214
QY 121 RLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTATQSFATCVCNVCWTVFH 180
DB 215 RLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTATQSFATCVCNVCWTVYH 274
QY 181 GAGSKTLAGPKGPIITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
DB 275 GAGSKTLAGPKGPIITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 334
QY 241 RRGDSRGSLLSPRPVSYLKSGSGPILLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
DB 335 RRGDSRGSLLSPRPVSYLKSGSGPILLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 394
QY 301 TMR 303
DB 395 TMR 397

RESULT 14
US-10-029-907-3
; Sequence 3, Application US/10029907
; Patent No. 6706874
; GENERAL INFORMATION:
; APPLICANT: BOHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; TITLE OF INVENTION: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/029,907
; CURRENT FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PR1
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-029-907-3

Query Match          96.3%; Score 1530; DB 4; Length 2201;
Best Local Similarity 95.0%; Pred. No. 3.3e-144;

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us-10-650-585-10.rad

Fri May 27 09:41:11 2005

Db 1204 TMR 1206

Search completed: May 26, 2005, 22:03:38
Job time : 18.5854 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: May 26, 2005, 21:58:09 ; Search time 52.7562 Seconds
(without alignments)
1981.317 Million cell updates/sec

Title: US-10-650-585-10
Perfect score: 1589
Sequence: 1 AGITKVPYFVRAOGLIRACM.....RGVAKAVDFIPVSMETMR 303

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1462099 seqs, 344972447 residues

Total number of hits satisfying chosen parameters: 1462099

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep.*
10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep.*
11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1589	100.0	303	13	US-10-017-736-10
2	1589	100.0	303	15	US-10-650-585-10
3	1589	100.0	334	13	US-10-017-736-4
4	1589	100.0	334	15	US-10-650-585-4
5	1589	100.0	341	13	US-10-017-736-14
6	1589	100.0	341	15	US-10-650-585-14
7	1589	100.0	352	13	US-10-017-736-13
8	1589	100.0	352	15	US-10-650-585-13
9	1589	100.0	380	13	US-10-017-736-12
10	1589	100.0	380	15	US-10-650-585-12
11	1589	100.0	393	13	US-10-017-736-11
12	1589	100.0	393	15	US-10-650-585-11
13	1589	100.0	409	13	US-10-017-736-2

14	1589	100.0	409	15	US-10-650-585-2	Sequence 2, Appli
15	1580	99.4	303	13	US-10-017-736-18	Sequence 18, Appl
16	1580	99.4	303	15	US-10-650-585-18	Sequence 18, Appl
17	1579	99.4	303	13	US-10-017-736-16	Sequence 16, Appl
18	1579	99.4	303	15	US-10-650-585-16	Sequence 16, Appl
19	1570	98.8	301	13	US-10-017-736-17	Sequence 17, Appl
20	1570	98.8	301	15	US-10-650-585-17	Sequence 17, Appl
21	1532	96.4	292	13	US-10-017-736-15	Sequence 15, Appl
22	1532	96.4	292	15	US-10-650-585-15	Sequence 15, Appl
23	1530	96.3	2201	13	US-10-029-907-3	Sequence 3, Appli
24	1530	96.3	2201	14	US-10-309-561-3	Sequence 3, Appli
25	1530	96.3	2201	16	US-10-789-355-3	Sequence 3, Appli
26	1530	96.3	3010	15	US-10-467-000-1	Sequence 1, Appli
27	1530	96.3	3010	16	US-10-333-449A-34	Sequence 34, Appl
28	1527	96.1	1692	10	US-09-919-901-4	Sequence 4, Appli
29	1527	96.1	1692	14	US-10-191-966-4	Sequence 2, Appli
30	1527	96.1	2307	10	US-09-919-901-2	Sequence 2, Appli
31	1527	96.1	2307	14	US-10-191-966-2	Sequence 2, Appli
32	1524	95.9	1692	10	US-09-919-901-11	Sequence 11, Appl
33	1524	95.9	1692	14	US-10-191-966-11	Sequence 11, Appl
34	1524	95.9	2307	10	US-09-919-901-9	Sequence 9, Appli
35	1524	95.9	2307	14	US-10-191-966-9	Sequence 9, Appli
36	1515	95.3	1692	10	US-09-919-901-18	Sequence 18, Appl
37	1515	95.3	1692	14	US-10-191-966-18	Sequence 18, Appl
38	1515	95.3	2307	10	US-09-919-901-16	Sequence 16, Appl
39	1515	95.3	2307	14	US-10-191-966-16	Sequence 16, Appl
40	1478	93.0	2201	13	US-10-085-476-2	Sequence 2, Appli
41	1405	88.4	3011	9	US-09-742-659-4	Sequence 4, Appli
42	1405	88.4	3011	10	US-09-891-894-3	Sequence 3, Appli
43	1405	88.4	3011	14	US-10-184-150-3	Sequence 3, Appli
44	1405	88.4	3011	15	US-10-328-997-3	Sequence 3, Appli
45	1405	88.4	3012	9	US-09-238-076-2	Sequence 2, Appli

ALIGNMENTS

RESULT 1
US-10-017-736-10
; Sequence 10, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-10

Query Match 100.0%; Score 1589; DB 13; Length 303;
Best Local Similarity 100.0%; Pred. No. 1.7e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGYVVDHLTFLQDMAHAG	60
Db	1	AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGYVVDHLTFLQDMAHAG	60
Qy	61	LRDLAVAPVIFSDMEVKIITWGAADTAACGDIISGLPVSARRREIILGPADNPEGQGW	120
Db	61	LRDLAVAPVIFSDMEVKIITWGAADTAACGDIISGLPVSARRREIILGPADNPEGQGW	120
Qy	121	RLAPITAYSOQRTGLGCIITSLTGRDKNQVEGVQVWSTATOSFLATCVNGVCWTVFH	180
Db	121	RLAPITAYSOQRTGLGCIITSLTGRDKNQVEGVQVWSTATOSFLATCVNGVCWTVFH	180

Qy 181 GAGSKTLAGPKGPITOMYTNVDQDLVQWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 240
Db 181 GAGSKTLAGPKGPITOMYTNVDQDLVQWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 240
Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db 241 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
Qy 301 TMR 303
Db 301 TMR 303

RESULT 2

US-10-650-585-10
; Sequence 10, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-10

Query Match 100.0%; Score 1589; DB 15; Length 303;
Best Local Similarity 100.0%; Pred. No. 1.7e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
Db 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
Qy 61 LRDLA VAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 61 LRDLA VAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Qy 121 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVVSSTATOSFLATCVNGVCWTVFH 180
Db 121 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVVSSTATOSFLATCVNGVCWTVFH 180
Qy 181 GAGSKTLAGPKGPITOMYTNVDQDLVQWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 240
Db 181 GAGSKTLAGPKGPITOMYTNVDQDLVQWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 240
Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db 241 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
Qy 301 TMR 303
Db 301 TMR 303

RESULT 3

US-10-017-736-4
; Sequence 4, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736

; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-4

Query Match 100.0%; Score 1589; DB 13; Length 334;
Best Local Similarity 100.0%; Pred. No. 1.9e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
Db 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 75
Qy 61 LRDLA VAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 76 LRDLA VAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
Qy 121 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVVSSTATOSFLATCVNGVCWTVFH 180
Db 136 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVVSSTATOSFLATCVNGVCWTVFH 195
Qy 181 GAGSKTLAGPKGPITOMYTNVDQDLVQWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 240
Db 196 GAGSKTLAGPKGPITOMYTNVDQDLVQWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 255
Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db 256 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
Qy 301 TMR 303
Db 316 TMR 318

RESULT 4

US-10-650-585-4
; Sequence 4, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-4

Query Match 100.0%; Score 1589; DB 15; Length 334;
Best Local Similarity 100.0%; Pred. No. 1.9e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
Db 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 75
Qy 61 LRDLA VAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 76 LRDLA VAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135

Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFLLATCVNGVCTVVFH 180
|
Db 136 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFLLATCVNGVCTVVFH 195
|
Qy 181 GAGSKTLAGPKGPITQMTYTNVDQDLVQWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
|
Db 196 GAGSKTLAGPKGPITQMTYTNVDQDLVQWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255
|
Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGPILCPGSHAVGIFRAAIVCTRGVAKAVDFIPVESMET 300
|
Db 256 RRGDSRGSLLSPRPVSYLKGSSGGPILCPGSHAVGIFRAAIVCTRGVAKAVDFIPVESMET 315
|
Qy 301 TMR 303
|
Db 316 TMR 318

RESULT 5

US-10-017-736-14
; Sequence 14, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-14

Query Match 100.0%; Score 1589; DB 13; Length 341;
Best Local Similarity 100.0%; Pred. No. 2e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
|
Db 39 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 98
|
Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
|
Db 99 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 158
|
Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFLLATCVNGVCTVVFH 180
|
Db 159 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFLLATCVNGVCTVVFH 218
|
Qy 181 GAGSKTLAGPKGPITQMTYTNVDQDLVQWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
|
Db 219 GAGSKTLAGPKGPITQMTYTNVDQDLVQWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 278
|
Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGPILCPGSHAVGIFRAAIVCTRGVAKAVDFIPVESMET 300
|
Db 279 RRGDSRGSLLSPRPVSYLKGSSGGPILCPGSHAVGIFRAAIVCTRGVAKAVDFIPVESMET 338
|
Qy 301 TMR 303
|
Db 339 TMR 341

RESULT 6

US-10-650-585-14
; Sequence 14, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; PRIOR FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-14

Query Match 100.0%; Score 1589; DB 15; Length 341;
Best Local Similarity 100.0%; Pred. No. 2e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
|
Db 39 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 98
|
Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
|
Db 99 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 158
|
Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFLLATCVNGVCTVVFH 180
|
Db 159 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFLLATCVNGVCTVVFH 218
|
Qy 181 GAGSKTLAGPKGPITQMTYTNVDQDLVQWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
|
Db 219 GAGSKTLAGPKGPITQMTYTNVDQDLVQWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 278
|
Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGPILCPGSHAVGIFRAAIVCTRGVAKAVDFIPVESMET 300
|
Db 279 RRGDSRGSLLSPRPVSYLKGSSGGPILCPGSHAVGIFRAAIVCTRGVAKAVDFIPVESMET 338
|
Qy 301 TMR 303
|
Db 339 TMR 341

RESULT 7

US-10-017-736-13
; Sequence 13, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-13

Query Match 100.0%; Score 1589; DB 13; Length 352;
Best Local Similarity 100.0%; Pred. No. 2e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
|
Db 50 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 109
|

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Qy 61 LRDLAVPEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 110 LRDLAVPEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 169
Qy 121 RLLAPITAYSQOTRGLGCIITSITGRDKNOVEGEVQVSTATOSFLATCVNGVCWTVEH 180
Db 170 RLLAPITAYSQOTRGLGCIITSITGRDKNOVEGEVQVSTATOSFLATCVNGVCWTVEH 229
Qy 181 GAGSKTLAGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 230 GAGSKTLAGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 289
Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db 290 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 349
Qy 301 TMR 303
Db 350 TMR 352

RESULT 8
US-10-650-585-13
; Sequence 13, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; PRIOR FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-13

Query Match 100.0%; Score 1589; DB 15; Length 352;
Best Local Similarity 100.0%; Pred. No. 2e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60
Db 50 AGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 109
Qy 61 LRDLAVPEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 110 LRDLAVPEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 169
Qy 121 RLLAPITAYSQOTRGLGCIITSITGRDKNOVEGEVQVSTATOSFLATCVNGVCWTVEH 180
Db 170 RLLAPITAYSQOTRGLGCIITSITGRDKNOVEGEVQVSTATOSFLATCVNGVCWTVEH 229
Qy 181 GAGSKTLAGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 230 GAGSKTLAGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 289
Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db 290 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 349
Qy 301 TMR 303
Db 350 TMR 352
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RESULT 9

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US-10-017-736-12
; Sequence 12, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-12

Query Match 100.0%; Score 1589; DB 13; Length 380;
Best Local Similarity 100.0%; Pred. No. 2.3e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60
Db 78 AGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 137
Qy 61 LRDLAVPEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 138 LRDLAVPEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 197
Qy 121 RLLAPITAYSQOTRGLGCIITSITGRDKNOVEGEVQVSTATOSFLATCVNGVCWTVEH 180
Db 198 RLLAPITAYSQOTRGLGCIITSITGRDKNOVEGEVQVSTATOSFLATCVNGVCWTVEH 257
Qy 181 GAGSKTLAGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 258 GAGSKTLAGPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 317
Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db 318 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 377
Qy 301 TMR 303
Db 378 TMR 380

RESULT 10
US-10-650-585-12
; Sequence 12, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-12

Query Match 100.0%; Score 1589; DB 15; Length 380;
Best Local Similarity 100.0%; Pred. No. 2.3e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
Db |||||
78 AGITKVPYFVRAOGLIRACMLVRKAAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 137
|||
Qy 61 LRLDIAVAPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNFEQGW 120
Db |||||
138 LRLDIAVAPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNFEQGW 197
|||
Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVWSTATQSFATCVCNGVCWTVFH 180
Db |||||
198 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVWSTATQSFATCVCNGVCWTVFH 257
|||
Qy 181 GAGSKTLAGPKGPITQMTYTNVDQLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db |||||
258 GAGSKTLAGPKGPITQMTYTNVDQLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 317
|||
Qy 241 RRGDSRGLSPRPVSYLKGSSGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db |||||
318 RRGDSRGLSPRPVSYLKGSSGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMET 377
|||
Qy 301 TMR 303
Db |||
378 TMR 380

RESULT 11
US-10-017-736-11
; Sequence 11, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-11

Query Match 100.0%; Score 1589; DB 13; Length 393;
Best Local Similarity 100.0%; Pred. No. 2.4e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
Db |||||
91 AGITKVPYFVRAOGLIRACMLVRKAAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 150
|||
Qy 61 LRLDIAVAPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNFEQGW 120
Db |||||
151 LRLDIAVAPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNFEQGW 210
|||
Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVWSTATQSFATCVCNGVCWTVFH 180
Db |||||
211 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVWSTATQSFATCVCNGVCWTVFH 270
|||
Qy 181 GAGSKTLAGPKGPITQMTYTNVDQLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db |||||
271 GAGSKTLAGPKGPITQMTYTNVDQLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 330
|||
Qy 241 RRGDSRGLSPRPVSYLKGSSGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db |||||
331 RRGDSRGLSPRPVSYLKGSSGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMET 390
|||
Qy 301 TMR 303
Db |||
391 TMR 393

RESULT 12
US-10-650-585-11
; Sequence 11, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-11

Query Match 100.0%; Score 1589; DB 15; Length 393;
Best Local Similarity 100.0%; Pred. No. 2.4e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
Db |||||
91 AGITKVPYFVRAOGLIRACMLVRKAAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 150
|||
Qy 61 LRLDIAVAPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNFEQGW 120
Db |||||
151 LRLDIAVAPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNFEQGW 210
|||
Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVWSTATQSFATCVCNGVCWTVFH 180
Db |||||
211 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVWSTATQSFATCVCNGVCWTVFH 270
|||
Qy 181 GAGSKTLAGPKGPITQMTYTNVDQLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db |||||
271 GAGSKTLAGPKGPITQMTYTNVDQLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 330
|||
Qy 241 RRGDSRGLSPRPVSYLKGSSGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db |||||
331 RRGDSRGLSPRPVSYLKGSSGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMET 390
|||
Qy 301 TMR 303
Db |||
391 TMR 393

RESULT 13
US-10-017-736-2
; Sequence 2, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-2

Query Match	100.0%	Score 1589;	DB 13;	Length 409;
Best Local Similarity	100.0%;	Pred. No. 2.5e-150;		
Matches 303;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	AGITKVPYFVRAOGLIRACMLKRAAGHYVQMAFMKLAALTGNYVYDHLTPLQDWAHAG	60	
Db	95	AGITKVPYFVRAOGLIRACMLKRAAGHYVQMAFMKLAALTGNYVYDHLTPLQDWAHAG	154	
Qy	61	LRDLAVAVEPVIFSDMEVKIITWGADTAAACGDIISGLPVSARRGREILLGPADNFEQGQW	120	
Db	155	LRDLAVAVEPVIFSDMEVKIITWGADTAAACGDIISGLPVSARRGREILLGPADNFEQGQW	214	
Qy	121	RLLIAPITAYSQOTRGLLGCIITSITGRDKKNQVEGEVQVSTATQSFLATCNGVCWTVFHF	180	
Db	215	RLLIAPITAYSQOTRGLLGCIITSITGRDKKNQVEGEVQVSTATQSFLATCNGVCWTVFHF	274	
Qy	181	GAGSKTLIAGPKGPITQMYTNNVDOLVGMQAPPGARSMTPTCCGSSDLYLVTRHADVI	240	
Db	275	GAGSKTLIAGPKGPITQMYTNNVDOLVGMQAPPGARSMTPTCCGSSDLYLVTRHADVI	334	
Qy	241	RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET	300	
Db	335	RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET	394	
Qy	301	TMR 303		
Db	395	TMR 397		

Query Match	100.0%	Score 1589;	DB 13;	Length 409;
Best Local Similarity	100.0%;	Pred. No. 2.5e-150;		
Matches 303;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	AGITKVPYFVRAOGLIRACMLVKRAAGHYVQMAFMKLAALTGVYVDHLTPLQDWAHAG	60	
Db	95	AGITKVPYFVRAOGLIRACMLVKRAAGHYVQMAFMKLAALTGVYVDHLTPLQDWAHAG	154	
Qy	61	LRDLAVAVEPVIFSDMEVKIITWGADTAAACGDIISGLPVSARRGREILLGPADNFEQGQW	120	
Db	155	LRDLAVAVEPVIFSDMEVKIITWGADTAAACGDIISGLPVSARRGREILLGPADNFEQGQW	214	
Qy	121	RLLIAPITAYSQOTRGLLGCIITSITGRDKNQVEGEVQVSTATQSFLATCNGVCWTVFHF	180	
Db	215	RLLIAPITAYSQOTRGLLGCIITSITGRDKNQVEGEVQVSTATQSFLATCNGVCWTVFHF	274	
Qy	181	GAGSKTLIAGPKGPITQMYTNNVDQLVGMQAPPGARSMTPCTCGSSDLYLVTRHADVI	240	
Db	275	GAGSKTLIAGPKGPITQMYTNNVDQLVGMQAPPGARSMTPCTCGSSDLYLVTRHADVI	334	
Qy	241	RRGDSRGSLLSPRPVSVYLGSSGGPLLCPSGHAVGIFRAAAVCTRGVAKAVDIFIPESMET	300	
Db	335	RRGDSRGSLLSPRPVSVYLGSSGGPLLCPSGHAVGIFRAAAVCTRGVAKAVDIFIPESMET	394	
Qy	301	TMR 303		
Db	395	TMR 397		

Db 301 PPGARSMPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPILLCPSS 360
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
RESULT 2
US-10-017-736C-2
; Sequence 2, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-2

Query Match 100.0%; Score 2053; DB 4; Length 409;
Best Local Similarity 100.0%; Pred. No. 5.1e-198;
Matches 393; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MAASCGGAVFTGLALLTSPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGGRDAI 60
Db 5 MAASCGGAVFTGLALLTSPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGGRDAI 64
Qy 61 ILLTCAVHPELIFDITKLLLAIFGLMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 65 ILLTCAVHPELIFDITKLLLAIFGLMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHY 124
Qy 121 VQAFMKLAALTGYVYVDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIITWADTAAC 180
Db 125 VQAFMKLAALTGYVYVDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIITWADTAAC 184
Qy 181 GDIISGLPVSARRGREILLGPADNPEGQWRLAPITAYSQOTRGLLGCIIITSLTGRDKN 240
Db 185 GDIISGLPVSARRGREILLGPADNPEGQWRLAPITAYSQOTRGLLGCIIITSLTGRDKN 244
Qy 241 QVEGEVQVSTATQSFATCNGVCWTVFHAGSKTLGPKGPITQMTYTNVDQDLVGWQA 300
Db 245 QVEGEVQVSTATQSFATCNGVCWTVFHAGSKTLGPKGPITQMTYTNVDQDLVGWQA 304
Qy 301 PPGARSMPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPILLCPSS 360
Db 305 PPGARSMPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPILLCPSS 364
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 365 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 3
US-10-017-736C-12
; Sequence 12, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-12

Query Match 96.8%; Score 1987; DB 4; Length 380;
Best Local Similarity 100.0%; Pred. No. 2e-191;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 14 ALLTSLSPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIF 73
Db 1 ALLTSLSPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIF 60
Qy 74 DITKLLLAIFGLMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQAFMKLAALTG 133
Db 61 DITKLLLAIFGLMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQAFMKLAALTG 120
Qy 134 TYVYDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIITWADTAACGDIISGLPVSARR 193
Db 121 TYVYDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIITWADTAACGDIISGLPVSARR 180
Qy 194 GREILLGPADNPEGQWRLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVSTAT 253
Db 181 GREILLGPADNPEGQWRLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVSTAT 240
Qy 254 QSFATCNGVCWTVFHAGSKTLGPKGPITQMTYTNVDQDLVGWQAPPGARSMPTCTCG 313
Db 241 QSFATCNGVCWTVFHAGSKTLGPKGPITQMTYTNVDQDLVGWQAPPGARSMPTCTCG 300
Qy 314 SSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPILLCPSSHAVGIFRAAVCT 373
Db 301 SSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPILLCPSSHAVGIFRAAVCT 360
Qy 374 RGAVAKAVDFIPVESMETTMR 393
Db 361 RGAVAKAVDFIPVESMETTMR 380

RESULT 4
US-09-539-601-6
; Sequence 6, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-6

Query Match 95.0%; Score 1951; DB 4; Length 2201;
Best Local Similarity 93.1%; Pred. No. 1.2e-186;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;
Qy 1 MAASCGGAVFTGLALLTSPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGGRDAI 60

Db 5 MAASCGGAVFVGLILLTLLSPHYKFLARLIWMLQYFITRAEHLQVMTPLNVRGGDAV 64
Qy 61 ILLTCAVHPELIFDITKLLAIFGLPMLVQAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 65 ILLTCAIHPELIFITIKLLAILGPLMVQAGITKVPYFVRAHGLIRACMLVRKVAGHY 124
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAAC 180
Db 125 VQAMLMKLAALTGTYYVDHLTPLRDWAHAGLRDLAVAVEPVIFSDMETKVTITWGADTAAC 184
Qy 181 GDIISGLPVSARRREIILGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDN 240
Db 185 GDIILGLPVSARRREIHLGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDN 244
Qy 241 QVEGEVQVSTATOSFLATCNGVCWTVFVHAGSKTLGPKGPITQMTYTNVDQDLVGWQA 300
Db 245 QVEGEVQVSTATOSFLATCNGVCWTVYHAGSKTLGPKGPITQMTYTNVDQDLVGWQA 304
Qy 301 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGRSGSLSPRPVSYLKGSSGGPILCPS 360
Db 305 PPGARSLTPCTCGSSDLYLVTRHADVIPVRRRGRSGSLSPRPVSYLKGSSGGPILCPS 364
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 365 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 5

US-09-539-601-15
; Sequence 15, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all references
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 2201
; TYPE: PRP
; ORGANISM: Hepatitis C virus
US-09-539-601-15

Query Match 95.0%; Score 1951; DB 4; Length 2201;
Best Local Similarity 93.1%; Pred. No. 1.2e-186;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFVGLILLTLLSPHYKFLARLIWMLQYFITRAEHLQVMTPLNVRGGDAI 60
Db 5 MAASCGGAVFVGLILLTLLSPHYKFLARLIWMLQYFITRAEHLQVMTPLNVRGGDAV 64
Qy 61 ILLTCAVHPELIFDITKLLAIFGLPMLVQAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 65 ILLTCAIHPELIFITIKLLAILGPLMVQAGITKVPYFVRAHGLIRACMLVRKVAGHY 124
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAAC 180
Db 125 VQAMLMKLAALTGTYYVDHLTPLRDWAHAGLRDLAVAVEPVIFSDMETKVTITWGADTAAC 184
Qy 181 GDIISGLPVSARRREIILGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDN 240
Db 185 GDIILGLPVSARRREIHLGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDN 244
Qy 241 QVEGEVQVSTATOSFLATCNGVCWTVFVHAGSKTLGPKGPITQMTYTNVDQDLVGWQA 300
Db 245 QVEGEVQVSTATOSFLATCNGVCWTVYHAGSKTLGPKGPITQMTYTNVDQDLVGWQA 304
Qy 301 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGRSGSLSPRPVSYLKGSSGGPILCPS 360

Db 305 PPGARSLTPCTCGSSDLYLVTRHADVIPVRRRGRSGSLSPRPVSYLKGSSGGPILCPS 364
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 365 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 6

US-10-029-907-3
; Sequence 3, Application US/100299907
; Patent No. 6706874
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; TITLE OF INVENTION: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/029,907
; CURRENT FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRP
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-029-907-3

Query Match 95.0%; Score 1951; DB 4; Length 2201;
Best Local Similarity 93.1%; Pred. No. 1.2e-186;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFVGLILLTLLSPHYKFLARLIWMLQYFITRAEHLQVMTPLNVRGGDAI 60
Db 5 MAASCGGAVFVGLILLTLLSPHYKFLARLIWMLQYFITRAEHLQVMTPLNVRGGDAV 64
Qy 61 ILLTCAVHPELIFDITKLLAIFGLPMLVQAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 65 ILLTCAIHPELIFITIKLLAILGPLMVQAGITKVPYFVRAHGLIRACMLVRKVAGHY 124
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAAC 180
Db 125 VQAMLMKLAALTGTYYVDHLTPLRDWAHAGLRDLAVAVEPVIFSDMETKVTITWGADTAAC 184
Qy 181 GDIISGLPVSARRREIILGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDN 240
Db 185 GDIILGLPVSARRREIHLGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDN 244
Qy 241 QVEGEVQVSTATOSFLATCNGVCWTVFVHAGSKTLGPKGPITQMTYTNVDQDLVGWQA 300
Db 245 QVEGEVQVSTATOSFLATCNGVCWTVYHAGSKTLGPKGPITQMTYTNVDQDLVGWQA 304
Qy 301 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGRSGSLSPRPVSYLKGSSGGPILCPS 360
Db 305 PPGARSLTPCTCGSSDLYLVTRHADVIPVRRRGRSGSLSPRPVSYLKGSSGGPILCPS 364
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 365 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 7

US-09-539-601-3
; Sequence 3, Application US/09539601C
; Patent No. 6630343

GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-3

Query Match 95.0%; Score 1951; DB 4; Length 3010;
Best Local Similarity 93.1%; Pred. No. 1.9e-186;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFIGLALLTLSPYKVLARLIWVQYLIITRVEAHLQVWIPPLNVRGGRDAI 60
Db 814 MAASCGGAVFVGLILLTLSPHYKLFARLIWVQYFITRAEHLQVWIPPLNVRGGRDAV 873

Qy 61 ILLTCAVHPELIFDITKLLAIFGFLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHY 120
Db 874 ILLTCAIHPELIFITIKLLAILGFLMVLQAGITKVPYFVRAHGLIRACMLVRKAGHY 933

Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPFIQSDMEVKIITWAGDTAAC 180
Db 934 VQALMKLAALTGTYYVDHLTPLRDWAHAGLRDLAVAVEPVPVFSMETKVIITWAGDTAAC 993

Qy 181 GDIISGLPVSARRREILLGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDN 240
Db 994 GDIILGLPVSARRREIHLGPADSLGQGWRLAPITAYSQOTRGLGCIITSLTGRDN 1053

Qy 241 QVEGEVQVSTATQSFLATCNGVCWTVFHHGAGSKTLAGPKGPITQMTYTNVDQDLVGWQA 300
Db 1054 QVEGEVQVSTATQSFLATCNGVCWTVFHHGAGSKTLAGPKGPITQMTYTNVDQDLVGWQA 1113

Qy 301 PPGARSMTPTCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGPLLCPS 360
Db 1114 PPGARSLTPTCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGPLLCPS 1173

Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 1174 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 1206

RESULT 8
US-09-539-601-21
; Sequence 21, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 21
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-21

Query Match 95.0%; Score 1951; DB 4; Length 3010;
Best Local Similarity 93.1%; Pred. No. 1.9e-186;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFIGLALLTLSPYKVLARLIWVQYLIITRVEAHLQVWIPPLNVRGGRDAI 60
Db 814 MAASCGGAVFVGLILLTLSPHYKLFARLIWVQYFITRAEHLQVWIPPLNVRGGRDAV 873

Qy 61 ILLTCAVHPELIFDITKLLAIFGFLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHY 120
Db 874 ILLTCAIHPELIFITIKLLAILGFLMVLQAGITKVPYFVRAHGLIRACMLVRKAGHY 933

Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPFIQSDMEVKIITWAGDTAAC 180
Db 934 VQALMKLAALTGTYYVDHLTPLRDWAHAGLRDLAVAVEPVPVFSMETKVIITWAGDTAAC 993

Qy 181 GDIISGLPVSARRREILLGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDN 240
Db 994 GDIILGLPVSARRREIHLGPADSLGQGWRLAPITAYSQOTRGLGCIITSLTGRDN 1053

Qy 241 QVEGEVQVSTATQSFLATCNGVCWTVFHHGAGSKTLAGPKGPITQMTYTNVDQDLVGWQA 300
Db 1054 QVEGEVQVSTATQSFLATCNGVCWTVFHHGAGSKTLAGPKGPITQMTYTNVDQDLVGWQA 1113

Qy 301 PPGARSMTPTCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGPLLCPS 360
Db 1114 PPGARSLTPTCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGPLLCPS 1173

Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 1174 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 1206

GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 27
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-27

Query Match 95.0%; Score 1951; DB 4; Length 3010;
Best Local Similarity 93.1%; Pred. No. 1.9e-186;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFIGLALLTLSPYKVLARLIWVQYLIITRVEAHLQVWIPPLNVRGGRDAI 60
Db 814 MAASCGGAVFVGLILLTLSPHYKLFARLIWVQYFITRAEHLQVWIPPLNVRGGRDAV 873

Qy 61 ILLTCAVHPELIFDITKLLAIFGFLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHY 120
Db 874 ILLTCAIHPELIFITIKLLAILGFLMVLQAGITKVPYFVRAHGLIRACMLVRKAGHY 933

Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPFIQSDMEVKIITWAGDTAAC 180
Db 934 VQALMKLAALTGTYYVDHLTPLRDWAHAGLRDLAVAVEPVPVFSMETKVIITWAGDTAAC 993

Qy 181 GDIISGLPVSARRREILLGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDN 240
Db 994 GDIILGLPVSARRREIHLGPADSLGQGWRLAPITAYSQOTRGLGCIITSLTGRDN 1053

Qy 241 QVEGEVQVSTATQSFLATCNGVCWTVFHHGAGSKTLAGPKGPITQMTYTNVDQDLVGWQA 300
Db 1054 QVEGEVQVSTATQSFLATCNGVCWTVFHHGAGSKTLAGPKGPITQMTYTNVDQDLVGWQA 1113

Qy 301 PPGARSMTPTCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGPLLCPS 360
Db 1114 PPGARSLTPTCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGPLLCPS 1173

Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 1174 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 1206

RESULT 9
US-09-539-601-27
; Sequence 27, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 27
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-27

Query Match 95.0%; Score 1951; DB 4; Length 3010;
Best Local Similarity 93.1%; Pred. No. 1.9e-186;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFIGLALLTLSPYKVLARLIWVQYLIITRVEAHLQVWIPPLNVRGGRDAI 60
Db 814 MAASCGGAVFVGLILLTLSPHYKLFARLIWVQYFITRAEHLQVWIPPLNVRGGRDAV 873

Qy 61 ILLTCAVHPELIFDITKLLAIFGFLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHY 120
Db 874 ILLTCAIHPELIFITIKLLAILGFLMVLQAGITKVPYFVRAHGLIRACMLVRKAGHY 933

Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPFIQSDMEVKIITWAGDTAAC 180
Db 934 VQALMKLAALTGTYYVDHLTPLRDWAHAGLRDLAVAVEPVPVFSMETKVIITWAGDTAAC 993

Qy 181 GDIISGLPVSARRREILLGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDN 240
Db 994 GDIILGLPVSARRREIHLGPADSLGQGWRLAPITAYSQOTRGLGCIITSLTGRDN 1053

Qy 241 QVEGEVQVSTATQSFLATCNGVCWTVFHHGAGSKTLAGPKGPITQMTYTNVDQDLVGWQA 300
Db 1054 QVEGEVQVSTATQSFLATCNGVCWTVFHHGAGSKTLAGPKGPITQMTYTNVDQDLVGWQA 1113


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Qy 301 PPGARSTPCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGPLLCP 360
Db 1114 PPGARSLTPCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGPLLCP 1173
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 1174 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 1206

RESULT 10
US-09-263-933-4
; Sequence 4, Application US/09263933
; Patent No. 6280940
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/263,933
; CURRENT FILING DATE: 1999-03-08
; EARLIER APPLICATION NUMBER: 09/129,611
; EARLIER FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
US-09-263-933-4

Query Match 94.8%; Score 1946; DB 3; Length 1692;
Best Local Similarity 92.9%; Pred. No. 2.5e-186;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFTGLALLTSLSPYKVLRLIWLQYLITRVEAHLQVWIPPLNVRGGRDAI 60
Db 93 MAASCGGAVFVGLVLLTSLSPYKVFRLIWLQYFTTRAERHLHVWIPPLNARGGRDAI 152
Qy 61 ILLTCAVHPELIFDITKLLAILFGLMVLQAGITKVPFVRAOGLIRACMLVRKAAGHY 120
Db 153 ILLMCAVHPELIFDITKLLTAILGLPLVQLQGITRVPFVRAOGLIHACMLVRKVAGHY 212
Qy 121 VQAFMKLAALTGYVYDHLTPLODWAHAGLRDLAVAVEPVPFSDMEVKIITWGADTAAC 180
Db 213 VQAFMKLGALTGYIYNHLTPLRDWAHAGLRDLAVAVEPVPFSDMETKIITWGADTAAC 272
Qy 181 GDIISGLPVSARRGREILLGPADNFEQGWRLLPITAYSQOTRGLLGCITSLTGRDKN 240
Db 273 GDIILGLPVSARRGKILLGPADSLGEGRWRLLPITAYSQOTRGLLGCITSLTGRDKN 332
Qy 241 QVEGEVQVSTATOSFLATCNGVCWTVFHGAGSKTLGPKGITOMYTNVDQDLVGWQA 300
Db 333 QVEGEVQVSTATOSFLATCNGVCWTVYHAGSKTLGPKGITOMYTNVDQDLVGWQA 392
Qy 301 PPGARSTPCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGPLLCP 360
Db 393 PPGARSLTPCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGPLLCP 452
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 453 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 11
US-09-919-901-4
; Sequence 4, Application US/09919901
; Patent No. 6599738
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
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; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; PRIOR FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-919-901-4

Query Match 94.8%; Score 1946; DB 4; Length 1692;
Best Local Similarity 92.9%; Pred. No. 2.5e-186;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFTGLALLTSLSPYKVLRLIWLQYLITRVEAHLQVWIPPLNVRGGRDAI 60
Db 93 MAASCGGAVFVGLVLLTSLSPYKVFRLIWLQYFTTRAERHLHVWIPPLNARGGRDAI 152
Qy 61 ILLTCAVHPELIFDITKLLAILFGLMVLQAGITKVPFVRAOGLIRACMLVRKAAGHY 120
Db 153 ILLMCAVHPELIFDITKLLTAILGLPLVQLQGITRVPFVRAOGLIHACMLVRKVAGHY 212
Qy 121 VQAFMKLAALTGYVYDHLTPLODWAHAGLRDLAVAVEPVPFSDMEVKIITWGADTAAC 180
Db 213 VQAFMKLGALTGYIYNHLTPLRDWAHAGLRDLAVAVEPVPFSDMETKIITWGADTAAC 272
Qy 181 GDIISGLPVSARRGREILLGPADNFEQGWRLLPITAYSQOTRGLLGCITSLTGRDKN 240
Db 273 GDIILGLPVSARRGKILLGPADSLGEGRWRLLPITAYSQOTRGLLGCITSLTGRDKN 332
Qy 241 QVEGEVQVSTATOSFLATCNGVCWTVFHGAGSKTLGPKGITOMYTNVDQDLVGWQA 300
Db 333 QVEGEVQVSTATOSFLATCNGVCWTVYHAGSKTLGPKGITOMYTNVDQDLVGWQA 392
Qy 301 PPGARSTPCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGPLLCP 360
Db 393 PPGARSLTPCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGPLLCP 452
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 453 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 12
US-10-191-966-4
; Sequence 4, Application US/10191966
; Patent No. 6790612
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191,966
; CURRENT FILING DATE: 2002-07-10
; PRIOR APPLICATION NUMBER: US/09/263,933
; PRIOR FILING DATE: 1999-03-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
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; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-10-191-966-4

Query Match          94.8%; Score 1946; DB 4; Length 1692;
Best Local Similarity 92.9%; Pred. No. 2.5e-186;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFGLALLTLSPYKVLARLIWVLYLITRVEAHQVWIPPLNVRGRDAI 60
Db 93 MAASCGGAVFGLVLLTLSPYKVLARLIWVLYLITRVEAHQVWIPPLNVRGRDAI 152
Qy 61 ILLTCAVHPELIFDITKLLIAIFGLPMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 153 ILLCAVHPELIFDITKLLIAIFGLPMVLQAGITRVPYFVRAOGLIRACMLVRKAAGHY 212
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVFSDMEVKIITWGADTAAC 180
Db 213 VQAFMKLGALTGTYYINHLTPLRDWAHAGLRDLAVAVEPVFSDMETKIITWGADTAAC 272
Qy 181 GDIISGLPVSARRGRIILGPADNFEQGWRLLIAPITAYSQOTRGLLGCIITSLTGRDKN 240
Db 273 GDIILGLPVSARRGRIILGPADNFEQGWRLLIAPITAYSQOTRGLLGCIITSLTGRDKN 332
Qy 241 QVEGEVQVSTATOSFLATCNGVCWTVFHHGAGSKTLAGPKGPIQMTYTNVDQDLVGWQA 300
Db 333 QVEGEVQVSTATOSFLATCNGVCWTVFHHGAGSKTLAGPKGPIQMTYTNVDQDLVGWQA 392
Qy 301 PPGARSTPTCTCGSSDLVLRHADVIPVRRRGDSRGSLLSPRVSVYLGSSGGPLLCPSS 360
Db 393 PPGARSLTPTCTCGSSDLVLRHADVIPVRRRGDSRGSLLSPRVSVYLGSSGGPLLCPSS 452
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 453 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 13
US-09-263-933-2
; Sequence 2, Application US/09263933
; Patent No. 6280940
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/263,933
; CURRENT FILING DATE: 1999-03-08
; EARLIER APPLICATION NUMBER: 09/129,611
; EARLIER FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 2307
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-263-933-2

Query Match          94.8%; Score 1946; DB 3; Length 2307;
Best Local Similarity 92.9%; Pred. No. 4e-186;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFGLALLTLSPYKVLARLIWVLYLITRVEAHQVWIPPLNVRGRDAI 60
Db 185 MAASCGGAVFGLVLLTLSPYKVLARLIWVLYLITRVEAHQVWIPPLNVRGRDAI 244
Qy 61 ILLTCAVHPELIFDITKLLIAIFGLPMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 195 MAASCGGAVFGLVLLTLSPYKVLARLIWVLYLITRVEAHQVWIPPLNVRGRDAI 244
Qy 61 ILLTCAVHPELIFDITKLLIAIFGLPMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 245 ILLCAVHPELIFDITKLLIAIFGLPMVLQAGITRVPYFVRAOGLIRACMLVRKAAGHY 304

Query Match          94.8%; Score 1946; DB 4; Length 2307;
Best Local Similarity 92.9%; Pred. No. 4e-186;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFGLALLTLSPYKVLARLIWVLYLITRVEAHQVWIPPLNVRGRDAI 60
Db 185 MAASCGGAVFGLVLLTLSPYKVLARLIWVLYLITRVEAHQVWIPPLNVRGRDAI 244
Qy 61 ILLTCAVHPELIFDITKLLIAIFGLPMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 245 ILLCAVHPELIFDITKLLIAIFGLPMVLQAGITRVPYFVRAOGLIRACMLVRKAAGHY 304

Query Match          94.8%; Score 1946; DB 4; Length 2307;
Best Local Similarity 92.9%; Pred. No. 4e-186;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFGLALLTLSPYKVLARLIWVLYLITRVEAHQVWIPPLNVRGRDAI 60
Db 185 MAASCGGAVFGLVLLTLSPYKVLARLIWVLYLITRVEAHQVWIPPLNVRGRDAI 244
Qy 61 ILLTCAVHPELIFDITKLLIAIFGLPMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 245 ILLCAVHPELIFDITKLLIAIFGLPMVLQAGITRVPYFVRAOGLIRACMLVRKAAGHY 304
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OM protein - protein search, using sw model

Run on: May 26, 2005, 21:58:09 ; Search time 68.4263 Seconds

(without alignments)
1981.317 Million cell updates/sec

Title: US-10-650-585-11

Perfect score: 2053

Sequence: 1 MAASCGGAVFIGLALLTSLP.....RGVAKAVDFIPVSMETMR 393

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1462099 seqs, 344972447 residues

Total number of hits satisfying chosen parameters: 1462099

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:*
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep.*
10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep.*
11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2053	100.0	393	13	US-10-017-736-11
2	2053	100.0	393	13	US-10-650-585-11
3	2053	100.0	409	13	US-10-017-736-2
4	2053	100.0	409	15	US-10-650-585-2
5	1987	96.8	380	13	US-10-017-736-12
6	1987	96.8	380	15	US-10-650-585-12
7	1951	95.0	2201	13	US-10-029-907-3
8	1951	95.0	2201	14	US-10-309-561-3
9	1951	95.0	2201	16	US-10-789-355-3
10	1951	95.0	3010	15	US-10-467-000-1
11	1946	94.8	1692	10	US-09-919-901-4
12	1946	94.8	1692	14	US-10-191-966-4
13	1946	94.8	2307	10	US-09-919-901-2

14	1946	94.8	2307	14	US-10-191-966-2	Sequence 2, Appli
15	1943	94.6	1692	10	US-09-919-901-11	Sequence 11, Appl
16	1943	94.6	1692	14	US-10-191-966-11	Sequence 11, Appl
17	1943	94.6	2307	10	US-09-919-901-9	Sequence 9, Appli
18	1943	94.6	2307	14	US-10-191-966-9	Sequence 9, Appli
19	1934	94.2	1692	10	US-09-919-901-18	Sequence 18, Appl
20	1934	94.2	1692	14	US-10-191-966-18	Sequence 18, Appl
21	1934	94.2	2307	10	US-09-919-901-16	Sequence 16, Appl
22	1934	94.2	2307	14	US-10-191-966-16	Sequence 16, Appl
23	1929	94.0	3010	16	US-10-333-449A-34	Sequence 34, Appl
24	1888	92.0	2201	13	US-10-085-476-2	Sequence 2, Appli
25	1842	89.7	352	13	US-10-017-736-13	Sequence 13, Appl
26	1842	89.7	352	15	US-10-650-585-13	Sequence 13, Appl
27	1778	86.6	341	13	US-10-017-736-14	Sequence 14, Appl
28	1778	86.6	341	15	US-10-650-585-14	Sequence 14, Appl
29	1772	86.3	2985	14	US-10-259-275-40	Sequence 40, Appl
30	1766	86.0	3011	9	US-09-742-659-4	Sequence 4, Appli
31	1766	86.0	3011	10	US-09-891-894-3	Sequence 3, Appli
32	1766	86.0	3011	14	US-10-184-150-3	Sequence 3, Appli
33	1766	86.0	3011	15	US-10-328-997-3	Sequence 3, Appli
34	1766	86.0	3012	9	US-09-238-076-2	Sequence 2, Appli
35	1766	86.0	3012	10	US-09-995-937-2	Sequence 2, Appli
36	1766	86.0	3012	10	US-09-917-563-2	Sequence 2, Appli
37	1764	85.9	3011	9	US-09-916-359-2	Sequence 2, Appli
38	1764	85.9	3011	15	US-10-296-734-406	Sequence 406, App
39	1764	85.9	3011	16	US-10-445-724-2	Sequence 2, Appli
40	1762	85.8	3011	9	US-09-238-076-20	Sequence 20, Appl
41	1762	85.8	3011	10	US-09-995-937-20	Sequence 20, Appl
42	1762	85.8	3011	10	US-09-917-563-20	Sequence 20, Appl
43	1759	85.7	2894	9	US-09-941-611-23	Sequence 23, Appl
44	1759	85.7	2894	14	US-10-044-995-23	Sequence 23, Appl
45	1759	85.7	2894	16	US-10-822-871-23	Sequence 23, Appl

ALIGNMENTS

RESULT 1
US-10-017-736-11
; Sequence 11, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736-11

Query Match 100.0%; Score 2053; DB 13; Length 393;
Best Local Similarity 100.0%; Pred. No. 7.7e-190;
Matches 393; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MAASCGGAVFIGLALLTSLPYKVLARLIWVLAHQLQVWIPPLNVRGRDAI 60
Db 1 MAASCGGAVFIGLALLTSLPYKVLARLIWVLAHQLQVWIPPLNVRGRDAI 60
Qy 61 ILLTCAVHPELIFDITKLLAI FGLMVLQNGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 61 ILLTCAVHPELIFDITKLLAI FGLMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Qy 121 VQAFMKLAALTGYVYDHLTPTLDWAHAGLRDLAVAVPEVIFSDMEVKIITWAGDTAAC 180
Db 121 VQAFMKLAALTGYVYDHLTPTLDWAHAGLRDLAVAVPEVIFSDMEVKIITWAGDTAAC 180

```
Qy 181 GDIISGLPVSARRGREILLGPADNFEQGQWLLAPITAYSOOTRGLLGCIITSLTGRDKN 240
Db 181 GDIISGLPVSARRGREILLGPADNFEQGQWLLAPITAYSOOTRGLLGCIITSLTGRDKN 240
Qy 241 QVEGEVQVSTATQSFLATCNGVCWTVFHHAGSKTLAGPKGPTQMTYNNVDQLVWGQA 300
Db 241 QVEGEVQVSTATQSFLATCNGVCWTVFHHAGSKTLAGPKGPTQMTYNNVDQLVWGQA 300
Qy 301 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYLGSSGGPILCP 360
Db 301 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYLGSSGGPILCP 360
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
```

RESULT 2

```
US-10-650-585-11
; Sequence 11, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-11
```

```
Query Match 100.0%; Score 2053; DB 15; Length 393;
Best Local Similarity 100.0%; Pred. No. 7.7e-190;
Matches 393; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 MAASCGGAVFTGLALLTSLSPYKVLARLIWMLQYLITRVEAHLQVWIPLNVRGGRDAI 60
Db 1 MAASCGGAVFTGLALLTSLSPYKVLARLIWMLQYLITRVEAHLQVWIPLNVRGGRDAI 60
Qy 61 ILLTCAVHPELIFDITKLLLAIFGLPLMVLAQITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 61 ILLTCAVHPELIFDITKLLLAIFGLPLMVLAQITKVPYFVRAOGLIRACMLVRKAAGHY 120
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGRLDAVAPEVIFSDMEVKIITWGDATTAAC 180
Db 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGRLDAVAPEVIFSDMEVKIITWGDATTAAC 180
Qy 181 GDIISGLPVSARRGREILLGPADNFEQGQWLLAPITAYSOOTRGLLGCIITSLTGRDKN 240
Db 181 GDIISGLPVSARRGREILLGPADNFEQGQWLLAPITAYSOOTRGLLGCIITSLTGRDKN 240
Qy 241 QVEGEVQVSTATQSFLATCNGVCWTVFHHAGSKTLAGPKGPTQMTYNNVDQLVWGQA 300
Db 241 QVEGEVQVSTATQSFLATCNGVCWTVFHHAGSKTLAGPKGPTQMTYNNVDQLVWGQA 300
Qy 301 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYLGSSGGPILCP 360
Db 301 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYLGSSGGPILCP 360
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
```

RESULT 3

```
US-10-017-736-2
; Sequence 2, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-2
```

```
Query Match 100.0%; Score 2053; DB 13; Length 409;
Best Local Similarity 100.0%; Pred. No. 8.1e-190;
Matches 393; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MAASCGGAVFTGLALLTSLSPYKVLARLIWMLQYLITRVEAHLQVWIPLNVRGGRDAI 60
Db 5 MAASCGGAVFTGLALLTSLSPYKVLARLIWMLQYLITRVEAHLQVWIPLNVRGGRDAI 64
Qy 61 ILLTCAVHPELIFDITKLLLAIFGLPLMVLAQITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 65 ILLTCAVHPELIFDITKLLLAIFGLPLMVLAQITKVPYFVRAOGLIRACMLVRKAAGHY 124
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGRLDAVAPEVIFSDMEVKIITWGDATTAAC 180
Db 125 VQAFMKLAALTGTYYVDHLTPLODWAHAGRLDAVAPEVIFSDMEVKIITWGDATTAAC 184
Qy 181 GDIISGLPVSARRGREILLGPADNFEQGQWLLAPITAYSOOTRGLLGCIITSLTGRDKN 240
Db 185 GDIISGLPVSARRGREILLGPADNFEQGQWLLAPITAYSOOTRGLLGCIITSLTGRDKN 244
Qy 241 QVEGEVQVSTATQSFLATCNGVCWTVFHHAGSKTLAGPKGPTQMTYNNVDQLVWGQA 300
Db 245 QVEGEVQVSTATQSFLATCNGVCWTVFHHAGSKTLAGPKGPTQMTYNNVDQLVWGQA 304
Qy 301 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYLGSSGGPILCP 360
Db 305 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYLGSSGGPILCP 364
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 365 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397
```

RESULT 4

```
US-10-650-585-2
; Sequence 2, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-2
```

Query Match 100.0%; Score 2053; DB 15; Length 409;
Best Local Similarity 100.0%; Pred. No. 8.1e-190;
Matches 393; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MAASCCGAVFIGLALITLSPYKVLARLIWVLOYLITRVEAHLOWIPPLNVRGGRDAI 60
DB 5 MAASCCGAVFIGLALITLSPYKVLARLIWVLOYLITRVEAHLOWIPPLNVRGGRDAI 64
QY 61 ILLTCAVHPELIDITKLLAIFGPLMWLOAGITKVPYFVRAQGLIRACMLVRKAAGHY 120
DB 65 ILLTCAVHPELIDITKLLAIFGPLMWLOAGITKVPYFVRAQGLIRACMLVRKAAGHY 124
QY 121 VQWAFMKAALATCTYYVDHLTPLODWAHAGLRDLAVAVEPVSFDMVEVKIITWGADTAAC 180
DB 125 VQWAFMKAALATCTYYVDHLTPLODWAHAGLRDLAVAVEPVSFDMVEVKIITWGADTAAC 184
QY 181 GDIISGLPVSARRGRIILGPADNFGQWRLLAPITAYSQOTRGLLGCIITSLTGRDKN 240
DB 185 GDIISGLPVSARRGRIILGPADNFGQWRLLAPITAYSQOTRGLLGCIITSLTGRDKN 244
QY 241 QVEGEVQVSTATQSFATCVNGVCTVPHGAGSKTLAGPKGPIITQMTNVDDQDLVGWQA 300
DB 245 QVEGEVQVSTATQSFATCVNGVCTVPHGAGSKTLAGPKGPIITQMTNVDDQDLVGWQA 304
QY 301 PPGARSMPTCTGSSDLVLTTRHADVIPIVRRRGDSRGSLLSPRPVSYLKSGSGGPLLCPS 360
DB 305 PPGARSMPTCTGSSDLVLTTRHADVIPIVRRRGDSRGSLLSPRPVSYLKSGSGGPLLCPS 364
QY 361 CHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
DB 365 CHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 5

US-10-017-736-12

; Sequence 12, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-12

Query Match 96.8%; Score 1987; DB 15; Length 380;
Best Local Similarity 100.0%; Pred. No. 1.8e-183;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 14 ALLTISPYKVLARLIWVLOYLITRVEAHLOWIPPLNVRGGRDAIILLTCAVHPELIF 73
DB 1 ALLTISPYKVLARLIWVLOYLITRVEAHLOWIPPLNVRGGRDAIILLTCAVHPELIF 60
QY 74 DITKLLAIFGPLMWLOAGITKVPYFVRAQGLIRACMLVRKAAGHYVQWAFMKAALATG 133
DB 61 DITKLLAIFGPLMWLOAGITKVPYFVRAQGLIRACMLVRKAAGHYVQWAFMKAALATG 120
QY 134 TVYVDHLTPLODWAHAGLRDLAVAVEPVSFDMVEVKIITWGADTAACGDIISGLPVSARR 193
DB 121 TVYVDHLTPLODWAHAGLRDLAVAVEPVSFDMVEVKIITWGADTAACGDIISGLPVSARR 180
QY 194 GREILLGPADNFGQWRLLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVSTAT 253
DB 181 GREILLGPADNFGQWRLLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVSTAT 240
QY 254 QSFLATCVNGVCTVPHGAGSKTLAGPKGPIITQMTNVDDQDLVGWQAPPGARSMPTCTCG 313
DB 241 QSFLATCVNGVCTVPHGAGSKTLAGPKGPIITQMTNVDDQDLVGWQAPPGARSMPTCTCG 300
QY 314 SSDLYLVTRHADVIPIVRRRGDSRGSLLSPRPVSYLKSGSGGPLLCPSGHAVGIFRAAVCT 373
DB 301 SSDLYLVTRHADVIPIVRRRGDSRGSLLSPRPVSYLKSGSGGPLLCPSGHAVGIFRAAVCT 360
QY 374 RGVAKAVDFIPVESMETTMR 393
DB 361 RGVAKAVDFIPVESMETTMR 380

RESULT 7

US-10-029-907-3

; Sequence 3, Application US/10029907
; Publication No. US20020142350A1

Query Match 96.8%; Score 1987; DB 13; Length 380;
Best Local Similarity 100.0%; Pred. No. 1.8e-183;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 14 ALLTISPYKVLARLIWVLOYLITRVEAHLOWIPPLNVRGGRDAIILLTCAVHPELIF 73
DB 1 ALLTISPYKVLARLIWVLOYLITRVEAHLOWIPPLNVRGGRDAIILLTCAVHPELIF 60
QY 74 DITKLLAIFGPLMWLOAGITKVPYFVRAQGLIRACMLVRKAAGHYVQWAFMKAALATG 133
DB 61 DITKLLAIFGPLMWLOAGITKVPYFVRAQGLIRACMLVRKAAGHYVQWAFMKAALATG 120
QY 134 TVYVDHLTPLODWAHAGLRDLAVAVEPVSFDMVEVKIITWGADTAACGDIISGLPVSARR 193
DB 121 TVYVDHLTPLODWAHAGLRDLAVAVEPVSFDMVEVKIITWGADTAACGDIISGLPVSARR 180
QY 194 GREILLGPADNFGQWRLLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVSTAT 253
DB 181 GREILLGPADNFGQWRLLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVSTAT 240

```

; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/029,907
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: HCV
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
; US-10-029-907-3

Query Match          95.0%; Score 1951; DB 13; Length 2201;
Best Local Similarity 93.1%; Pred. No. 5.9e-179;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;

QY 1 MAASCGGAVFIGLALTLSPYYKVLARLIWMLOYLITRVEAHLQVWIPPLNVRGGRDAI 60
Db 5 MAASCGGAVFVGLILLTLSPHYKLFARLIWMLOYLITRAEHLQVWIPPLNVRGGRDAV 64
QY 61 ILLTCAVHPELIPIIDIKLLAIIFGMLVLAQGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 65 ILLTCAIHPELIPTITIKLLAILGPLVLAQGITKVPYFVRAHGLIRACMLVRKVAGHY 124
QY 121 VQAFMKLAALTGTYVDHLTPLODWAHAGLRDLAVAVEPVPFSDMEVKIITWGADTAAC 180
Db 125 VQALMKLAALTGTYVDHLTPLRDWAHAGLRDLAVAVEPVPFSDMETKVTITWGADTAAC 184
QY 181 GDIISGLPVSARRGRIILGPADNFGQWRLAPITAYSQQTRGLGCIITSLTGRDKN 240
Db 185 GDIILGLPVSARRGRIHGLPADSLEGGWRLAPITAYSQQTRGLGCIITSLTGRDN 244
QY 241 QVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGPKGPIQMTYTNVDQDLVGMQA 300
Db 245 QVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGPKGPIQMTYTNVDQDLVGMQA 304
QY 301 PPGARSWTPTCGSSDLVLTTRHADVIPVRRRGRSGSLSPRPVSYLKGSSGGPLLCP 360
Db 305 PPGARSWTPTCGSSDLVLTTRHADVIPVRRRGRSGSLSPRPVSYLKGSSGGPLLCP 364
QY 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 365 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 8
US-10-309-561-3
; Sequence 3, Application US/10309561
; Publication No. US20030148348A1
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/309,561
; PRIOR FILING DATE: 2002-12-04
; PRIOR APPLICATION NUMBER: US/10/029,907
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25

; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/309,561
; PRIOR FILING DATE: 2002-12-04
; PRIOR APPLICATION NUMBER: US/10/029,907
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25

; US-10-029-907-3

Query Match          95.0%; Score 1951; DB 13; Length 2201;
Best Local Similarity 93.1%; Pred. No. 5.9e-179;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;

QY 1 MAASCGGAVFIGLALTLSPYYKVLARLIWMLOYLITRVEAHLQVWIPPLNVRGGRDAI 60
Db 5 MAASCGGAVFVGLILLTLSPHYKLFARLIWMLOYLITRAEHLQVWIPPLNVRGGRDAV 64
QY 61 ILLTCAVHPELIPIIDIKLLAIIFGMLVLAQGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 65 ILLTCAIHPELIPTITIKLLAILGPLVLAQGITKVPYFVRAHGLIRACMLVRKVAGHY 124
QY 121 VQAFMKLAALTGTYVDHLTPLODWAHAGLRDLAVAVEPVPFSDMEVKIITWGADTAAC 180
Db 125 VQALMKLAALTGTYVDHLTPLRDWAHAGLRDLAVAVEPVPFSDMETKVTITWGADTAAC 184
QY 181 GDIISGLPVSARRGRIILGPADNFGQWRLAPITAYSQQTRGLGCIITSLTGRDKN 240
Db 185 GDIILGLPVSARRGRIHGLPADSLEGGWRLAPITAYSQQTRGLGCIITSLTGRDN 244
QY 241 QVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGPKGPIQMTYTNVDQDLVGMQA 300
Db 245 QVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGPKGPIQMTYTNVDQDLVGMQA 304
QY 301 PPGARSWTPTCGSSDLVLTTRHADVIPVRRRGRSGSLSPRPVSYLKGSSGGPLLCP 360
Db 305 PPGARSWTPTCGSSDLVLTTRHADVIPVRRRGRSGSLSPRPVSYLKGSSGGPLLCP 364
QY 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 365 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 9
US-10-789-355-3
; Sequence 3, Application US/10789355
; Publication No. US20040180333A1
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/789,355
; PRIOR FILING DATE: 2004-02-27
; PRIOR APPLICATION NUMBER: US/10/029,907
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: HCV
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg

```



```
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-789-355-3

Query Match      95.0%; Score 1951; DB 16; Length 2201;
Best Local Similarity 93.1%; Pred. No. 5.9e-179;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;

QY 1 MAASCGGAVFIGLALLTSPYKVLRLIWLQYLTIRVEAHLQVWIPPLNVRGGGDAI 60
DB 5 MAASCGGAVFGLILLTSPYKFLRLIWLQYFITRAEHLQVWIPPLNVRGGGDAV 64
QY 61 ILTCAVHPELIFDITKLLAIFGLPLMVLOAGITKVPYFVRAQGLIRACMLVRKAAGHY 120
DB 65 ILTCAIHPELIFITIKLLAILGLPLMVLOAGITKVPYFVRAHGLIRACMLVRKVAGHY 124
QY 121 VQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGDATTAAC 180
DB 125 VQWALMKLAALTGTYYVDHLTPLRDWAHAGLRDLAVAVEPVVFSMDMETKVIITWGDATTAAC 184
QY 181 GDIISGLPVSARRGREILLGPADNFEQGWRLLPITAYSQOTRGLLGCIITSLTGRDKN 240
DB 185 GDIILGLPVSARRGREIHLGPADNFEQGWRLLPITAYSQOTRGLLGCIITSLTGRDRN 244
QY 241 QVEGEVQVSTATOSFLATCNGVCWTVFHHGAGSKTLAGPKGPIITQMTYTNVDQDLVGWQA 300
DB 245 QVEGEVQVSTATOSFLATCNGVCWTVFHHGAGSKTLAGPKGPIITQMTYTNVDQDLVGWQA 304
QY 301 PGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYLGSSGCGPLLCPS 360
DB 305 PGARSLTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYLGSSGCGPLLCPS 364
QY 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
DB 365 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 10
US-10-467-000-1
; Sequence 1, Application US/10467000
; Publication No. US20040067486A1
; GENERAL INFORMATION:
; APPLICANT: De Francesco, Raffaele
; APPLICANT: Migliaccio, Giovanni
; APPLICANT: Paonessa, Giacomo
; TITLE OF INVENTION: HEPATITIS C VIRUS REPLICONS AND REPLICON
; FILE REFERENCE: ITR0003P
; CURRENT APPLICATION NUMBER: US/10/467,000
; PRIOR FILING DATE: 2003-07-21
; PRIOR FILING DATE: PCT/EP02/00526
; PRIOR FILING DATE: 2002-01-16
; PRIOR APPLICATION NUMBER: 60/263,479
; PRIOR FILING DATE: 2001-01-23
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Fast-Seq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Con 1 HCV isolate nucleic acid
US-10-467-000-1

Query Match      95.0%; Score 1951; DB 15; Length 3010;
Best Local Similarity 93.1%; Pred. No. 8.9e-179;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;

QY 1 MAASCGGAVFIGLALLTSPYKVLRLIWLQYLTIRVEAHLQVWIPPLNVRGGGDAI 60
DB 814 MAASCGGAVFGLILLTSPYKFLRLIWLQYFITRAEHLQVWIPPLNVRGGGDAV 873
QY 61 ILTCAVHPELIFDITKLLAIFGLPLMVLOAGITKVPYFVRAQGLIRACMLVRKAAGHY 120

; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-789-355-3

Query Match      95.0%; Score 1951; DB 16; Length 2201;
Best Local Similarity 93.1%; Pred. No. 5.9e-179;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;

QY 1 MAASCGGAVFIGLALLTSPYKVLRLIWLQYLTIRVEAHLQVWIPPLNVRGGGDAI 60
DB 5 MAASCGGAVFGLILLTSPYKFLRLIWLQYFITRAEHLQVWIPPLNVRGGGDAV 64
QY 61 ILTCAVHPELIFDITKLLAIFGLPLMVLOAGITKVPYFVRAQGLIRACMLVRKAAGHY 120
DB 65 ILTCAIHPELIFITIKLLAILGLPLMVLOAGITKVPYFVRAHGLIRACMLVRKVAGHY 124
QY 121 VQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGDATTAAC 180
DB 125 VQWALMKLAALTGTYYVDHLTPLRDWAHAGLRDLAVAVEPVVFSMDMETKVIITWGDATTAAC 184
QY 181 GDIISGLPVSARRGREILLGPADNFEQGWRLLPITAYSQOTRGLLGCIITSLTGRDKN 240
DB 185 GDIILGLPVSARRGREIHLGPADNFEQGWRLLPITAYSQOTRGLLGCIITSLTGRDRN 244
QY 241 QVEGEVQVSTATOSFLATCNGVCWTVFHHGAGSKTLAGPKGPIITQMTYTNVDQDLVGWQA 300
DB 245 QVEGEVQVSTATOSFLATCNGVCWTVFHHGAGSKTLAGPKGPIITQMTYTNVDQDLVGWQA 304
QY 301 PGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYLGSSGCGPLLCPS 360
DB 305 PGARSLTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYLGSSGCGPLLCPS 364
QY 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
DB 365 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 11
US-09-919-901-4
; Sequence 4, Application US/09919901
; Publication No. US20030082518A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; CURRENT FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-919-901-4

Query Match      94.8%; Score 1946; DB 10; Length 1692;
Best Local Similarity 92.9%; Pred. No. 1.3e-178;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

QY 1 MAASCGGAVFIGLALLTSPYKVLRLIWLQYLTIRVEAHLQVWIPPLNVRGGGDAI 60
DB 93 MAASCGGAVFGLVLLTSPYKVLRLIWLQYFITRAEHLHVIWIPPLNARGGDAI 152
QY 61 ILTCAVHPELIFDITKLLAIFGLPLMVLOAGITKVPYFVRAQGLIRACMLVRKAAGHY 120
DB 153 ILTCAVHPELIFDITKLLAIFGLPLMVLOAGITRVPYFVRAQGLIHACMLVRKVAGHY 212
QY 121 VQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGDATTAAC 180
DB 213 VQWALMKLAALTGTYYVDHLTPLRDWAHAGLRDLAVAVEPVFSDMETKVIITWGDATTAAC 272
QY 181 GDIISGLPVSARRGREILLGPADNFEQGWRLLPITAYSQOTRGLLGCIITSLTGRDKN 240
DB 273 GDIILGLPVSARRGREILLGPADNFEQGWRLLPITAYSQOTRGLLGCIITSLTGRDKN 332
QY 241 QVEGEVQVSTATOSFLATCNGVCWTVFHHGAGSKTLAGPKGPIITQMTYTNVDQDLVGWQA 300
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Db 333 QVEGEVQVWSTATQSFATCNGVCTVYHAGSCKTLGPKGPITQMTYTNVDQDLVGWQA 392
Qy 301 PPGARSMPTCTCGSSDLYLVTRHADVIPVRRRGRSGSLSPRPVSVYKSGSGGPLLCP 360
Db 393 PPGARSLTPCTCGSSDLYLVTRHADVIPVRRRGRSGSLSPRPVSVYKSGSGGPLLCP 452
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 453 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 12
US-10-191-966-4
; Sequence 4, Application US/10191966
; Publication No. US20030175692A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191,966
; CURRENT FILING DATE: 2002-07-10
; PRIOR FILING DATE: 1999-03-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: :
US-10-191-966-4

Query Match 94.8%; Score 1946; DB 14; Length 1692;
Best Local Similarity 92.9%; Pred. No. 1.3e-178;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 1 MAASCAGAVFGLALLTSLSPYKVLARLIWLVQYITRVEAHLQVWIPPLNVRGRDAI 60
Db 93 MAASCAGAVFGLVLLTSLSPYKVLARLIWLVQYITRABAHHLVWIPPLNVRGRDAI 152
Qy 61 ILLTCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHY 120
Db 153 ILLMCAVHPELIFDITKLLAIALGPMVLQAGITRVPYFVRAQGLIHACMLVRKVAGHY 212
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGRLDIAVAPEVIFSDMEVKIITWGADTAAC 180
Db 213 VQAFMKLGALTGTYYNHLTPLRDWAHAGRLDIAVAPEVYVFSMETKIITWGADTAAC 272
Qy 181 GDIISGLPVSARRGRIILLGPADNFGQWRLAPITAYSQTRGLGCIITSLTGRDKN 240
Db 273 GDIILGLPVSARRGRIILLGPADNFGQWRLAPITAYSQTRGLGCIITSLTGRDKN 332
Qy 241 QVEGEVQVWSTATQSFATCNGVCTVYHAGSCKTLGPKGPITQMTYTNVDQDLVGWQA 300
Db 333 QVEGEVQVWSTATQSFATCNGVCTVYHAGSCKTLGPKGPITQMTYTNVDQDLVGWQA 392
Qy 301 PPGARSMPTCTCGSSDLYLVTRHADVIPVRRRGRSGSLSPRPVSVYKSGSGGPLLCP 360
Db 393 PPGARSLTPCTCGSSDLYLVTRHADVIPVRRRGRSGSLSPRPVSVYKSGSGGPLLCP 452
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 453 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 13
US-09-919-901-2

; Sequence 2, Application US/09919901
; Publication No. US20030082518A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; CURRENT FILING DATE: 2001-08-02
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 2307
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: :
US-09-919-901-2

Query Match 94.8%; Score 1946; DB 10; Length 2307;
Best Local Similarity 92.9%; Pred. No. 1.9e-178;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 1 MAASCAGAVFGLALLTSLSPYKVLARLIWLVQYITRVEAHLQVWIPPLNVRGRDAI 60
Db 185 MAASCAGAVFGLVLLTSLSPYKVLARLIWLVQYITRABAHHLVWIPPLNVRGRDAI 244
Qy 61 ILLTCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHY 120
Db 245 ILLMCAVHPELIFDITKLLAIALGPMVLQAGITRVPYFVRAQGLIHACMLVRKVAGHY 304
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGRLDIAVAPEVIFSDMEVKIITWGADTAAC 180
Db 305 VQAFMKLGALTGTYYNHLTPLRDWAHAGRLDIAVAPEVYVFSMETKIITWGADTAAC 364
Qy 181 GDIISGLPVSARRGRIILLGPADNFGQWRLAPITAYSQTRGLGCIITSLTGRDKN 240
Db 365 GDIILGLPVSARRGRIILLGPADNFGQWRLAPITAYSQTRGLGCIITSLTGRDKN 424
Qy 241 QVEGEVQVWSTATQSFATCNGVCTVYHAGSCKTLGPKGPITQMTYTNVDQDLVGWQA 300
Db 425 QVEGEVQVWSTATQSFATCNGVCTVYHAGSCKTLGPKGPITQMTYTNVDQDLVGWQA 484
Qy 301 PPGARSMPTCTCGSSDLYLVTRHADVIPVRRRGRSGSLSPRPVSVYKSGSGGPLLCP 360
Db 485 PPGARSLTPCTCGSSDLYLVTRHADVIPVRRRGRSGSLSPRPVSVYKSGSGGPLLCP 544
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 545 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 577

RESULT 14
US-10-191-966-2
; Sequence 2, Application US/10191966
; Publication No. US20030175692A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191,966
; CURRENT FILING DATE: 2002-07-10
; PRIOR FILING DATE: 1999-03-08

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OM protein - protein search, using sw model

Run on: May 26, 2005, 21:44:29 ; Search time 22.0543 Seconds
(without alignments)
1286.219 Million cell updates/sec

Title: US-10-650-585-12

Perfect score: 1987

Sequence: 1 ALLTSPYKVLARLIWL.....RGVAKAYDFIPVESMETTMR 380

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA.*

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2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep.*
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4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1987	100.0	380	4	US-10-017-736C-12
2	1987	100.0	393	4	US-10-017-736C-11
3	1987	100.0	409	4	US-10-017-736C-2
4	1887	95.0	2201	4	US-09-539-601-6
5	1887	95.0	2201	4	US-09-539-601-15
6	1887	95.0	2201	4	US-10-029-907-3
7	1887	95.0	3010	4	US-09-539-601-3
8	1887	95.0	3010	4	US-09-539-601-21
9	1887	95.0	3010	4	US-09-539-601-27
10	1881	94.7	1692	3	US-09-263-933-4
11	1881	94.7	1692	4	US-09-919-901-4
12	1881	94.7	1692	4	US-10-191-966-4
13	1881	94.7	2307	3	US-09-263-933-2
14	1881	94.7	2307	4	US-09-919-901-2
15	1881	94.7	2307	4	US-10-191-966-2
16	1880	94.6	3010	4	US-09-539-601-33
17	1878	94.5	1692	3	US-09-263-933-11
18	1878	94.5	1692	4	US-09-919-901-11
19	1878	94.5	1692	4	US-10-191-966-11
20	1878	94.5	2307	3	US-09-263-933-9
21	1878	94.5	2307	4	US-09-919-901-9
22	1878	94.5	2307	4	US-10-191-966-9
23	1869	94.1	1692	3	US-09-263-933-18
24	1869	94.1	1692	4	US-09-919-901-18
25	1869	94.1	1692	4	US-10-191-966-18
26	1869	94.1	2307	3	US-09-263-933-16
27	1869	94.1	2307	4	US-09-919-901-16

28	1869	94.1	2307	4	US-10-191-966-16	Sequence 16, Appl
29	1869	94.1	3010	3	US-09-014-416-3	Sequence 3, Appl
30	1842	92.7	352	4	US-10-017-736C-13	Sequence 13, Appl
31	1823	91.7	2013	1	US-08-324-977-12	Sequence 12, Appl
32	1823	91.7	2013	2	US-08-384-616-12	Sequence 12, Appl
33	1823	91.7	2013	2	US-08-904-686A-12	Sequence 12, Appl
34	1823	91.7	2013	3	US-09-315-850-12	Sequence 12, Appl
35	1823	91.7	2201	3	US-08-952-981A-2	Sequence 2, Appl
36	1823	91.7	2620	1	US-08-324-977-32	Sequence 32, Appl
37	1823	91.7	2620	2	US-08-384-616-32	Sequence 32, Appl
38	1823	91.7	2620	2	US-08-904-686A-32	Sequence 32, Appl
39	1823	91.7	2620	3	US-09-315-850-32	Sequence 32, Appl
40	1823	91.7	2621	1	US-08-324-977-36	Sequence 36, Appl
41	1823	91.7	2621	2	US-08-384-616-36	Sequence 36, Appl
42	1823	91.7	2621	2	US-08-904-686A-36	Sequence 36, Appl
43	1823	91.7	2621	3	US-09-315-850-36	Sequence 2, Appl
44	1823	91.7	3010	1	US-08-324-977-2	Sequence 14, Appl
45	1823	91.7	3010	1	US-08-324-977-14	

ALIGNMENTS

RESULT 1

US-10-017-736C-12

; Sequence 12, Application US/10017736C

; Patent No. 6815159

; GENERAL INFORMATION:

; APPLICANT: Thibeault, Diane

; APPLICANT: Lamarre, Daniel

; APPLICANT: Maurice, Roger

; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Armin

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease

; FILE REFERENCE: 13/082

; CURRENT APPLICATION NUMBER: US/10/017,736C

; CURRENT FILING DATE: 2001-12-14

; PRIOR APPLICATION NUMBER: 60/256,031

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 12

; LENGTH: 380

; TYPE: PRT

; ORGANISM: HCV

US-10-017-736C-12

Query Match 100.0%; Score 1987; DB 4; Length 380;

Best Local Similarity 100.0%; Pred. No. 2.9e-192;

Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	ALLTSPYKVLARLIWLQYLITRVEAHQLQWIPPLNVRGGRDAILLTCAVHPELIF	60
Db	1	ALLTSPYKVLARLIWLQYLITRVEAHQLQWIPPLNVRGGRDAILLTCAVHPELIF	60
Qy	61	DITKLLAIFGLPLVLAQGITKVPYFVRAQGLIRACMLVRKAAGGHYVQMAFMKLAALTG	120
Db	61	DITKLLAIFGLPLVLAQGITKVPYFVRAQGLIRACMLVRKAAGGHYVQMAFMKLAALTG	120
Qy	121	TYVYDHLTPLQDWAHAGLRDLAVAEVPIFSDMEVKLIITWGADTAACGDIISGLPVSARR	180
Db	121	TYVYDHLTPLQDWAHAGLRDLAVAEVPIFSDMEVKLIITWGADTAACGDIISGLPVSARR	180
Qy	181	GRELLGPADEFQGWRLAPITAYSQQTRGLLGCIITSLTGRDKKQVEGEVQVWSTAT	240
Db	181	GRELLGPADEFQGWRLAPITAYSQQTRGLLGCIITSLTGRDKKQVEGEVQVWSTAT	240
Qy	241	QSFLATCVNGVCWTFVHGAGSKTLGAPKGPITQMTNVDDLVGQVQAPPGARSMTPTCTCG	300
Db	241	QSFLATCVNGVCWTFVHGAGSKTLGAPKGPITQMTNVDDLVGQVQAPPGARSMTPTCTCG	300
Qy	301	SSDLYLVTRHADVIPIVRRRGDSRGSLLSPRPVSYLKSSGGPLICPSGHAVGIIFRAAVCT	360
Db	301	SSDLYLVTRHADVIPIVRRRGDSRGSLLSPRPVSYLKSSGGPLICPSGHAVGIIFRAAVCT	360

Db 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPILCPSGHAVGIFRAAVCT 360
Qy 361 RGVAKAVDFIPVESMETTMR 380
Db 361 RGVAKAVDFIPVESMETTMR 380

RESULT 2

US-10-017-736C-11
; Sequence 11, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-11

Query Match 100.0%; Score 1987; DB 4; Length 393;
Best Local Similarity 100.0%; Pred. No. 3e-192;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALLTSPYKVLARLIWQLYLRVEAHLQVWIPPLNVGRGDAIILLTCAVHPELIF 60
Db 14 ALLTSPYKVLARLIWQLYLRVEAHLQVWIPPLNVGRGDAIILLTCAVHPELIF 73
Qy 61 DITKLLAIFGLMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTG 120
Db 74 DITKLLAIFGLMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTG 133
Qy 121 TVYVDHLTPLQDWAHAGRLDVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARR 180
Db 134 TVYVDHLTPLQDWAHAGRLDVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARR 193
Qy 181 GREILLGPADNFEQGWRLAPITAYSQOTRGLLGCIITSLTGRDKNOVEGEVQVSTAT 240
Db 194 GREILLGPADNFEQGWRLAPITAYSQOTRGLLGCIITSLTGRDKNOVEGEVQVSTAT 253
Qy 241 QSFILATCVNGVCWTVFHGAGSKTLGPKGPIQMTYTNVDQDLVGQAPPGARSMPTCTCG 300
Db 254 QSFILATCVNGVCWTVFHGAGSKTLGPKGPIQMTYTNVDQDLVGQAPPGARSMPTCTCG 313
Qy 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPILCPSGHAVGIFRAAVCT 360
Db 314 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPILCPSGHAVGIFRAAVCT 373
Qy 361 RGVAKAVDFIPVESMETTMR 380
Db 374 RGVAKAVDFIPVESMETTMR 393

RESULT 3

US-10-017-736C-2
; Sequence 2, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-2

Query Match 100.0%; Score 1987; DB 4; Length 409;
Best Local Similarity 100.0%; Pred. No. 3.2e-192;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALLTSPYKVLARLIWQLYLRVEAHLQVWIPPLNVGRGDAIILLTCAVHPELIF 60
Db 18 ALLTSPYKVLARLIWQLYLRVEAHLQVWIPPLNVGRGDAIILLTCAVHPELIF 77
Qy 61 DITKLLAIFGLMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTG 120
Db 78 DITKLLAIFGLMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTG 137
Qy 121 TVYVDHLTPLQDWAHAGRLDVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARR 180
Db 138 TVYVDHLTPLQDWAHAGRLDVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARR 197
Qy 181 GREILLGPADNFEQGWRLAPITAYSQOTRGLLGCIITSLTGRDKNOVEGEVQVSTAT 240
Db 198 GREILLGPADNFEQGWRLAPITAYSQOTRGLLGCIITSLTGRDKNOVEGEVQVSTAT 257
Qy 241 QSFILATCVNGVCWTVFHGAGSKTLGPKGPIQMTYTNVDQDLVGQAPPGARSMPTCTCG 300
Db 258 QSFILATCVNGVCWTVFHGAGSKTLGPKGPIQMTYTNVDQDLVGQAPPGARSMPTCTCG 317
Qy 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPILCPSGHAVGIFRAAVCT 360
Db 318 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPILCPSGHAVGIFRAAVCT 377
Qy 361 RGVAKAVDFIPVESMETTMR 380
Db 378 RGVAKAVDFIPVESMETTMR 397

RESULT 4

US-09-539-601-6
; Sequence 6, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-6

Query Match 95.0%; Score 1887; DB 4; Length 2201;
Best Local Similarity 93.4%; Pred. No. 5.1e-181;
Matches 354; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

Qy 2 LLTSPYKVLARLIWQLYLRVEAHLQVWIPPLNVGRGDAIILLTCAVHPELIF 61

Db 19 LTLSPHYKFLARLIWVLOQYFTRAEHLQVWIPPLNVRGGSDAVILLTCAIHPELIPT 78
QY 62 ITKLLAIIFGPMVLQAGITKVPYFVRAOGLIRACMLVRKAAGCHYVQMAFMKLAALTGT 121
Db 79 ITKLLAIILGPMVLQAGITKVPYFVRAGLIRACMLVRKVAGGHYVQMALMKLAALTGT 138
QY 122 YVVDHLTPLODWAHAGLRDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db 139 YVVDHLTPLRDWAHAGLRDLAVAVEPVFSDMETKVTITWGADTAACGDIISGLPVSARRG 198
QY 182 REILGPDNPFEGQWRLLAPITAYSQOTRGLLGCITSLTGDRDNQVGEVQVWSTATQ 241
Db 199 REIHLGPDNPFEGQWRLLAPITAYSQOTRGLLGCITSLTGDRDNQVGEVQVWSTATQ 258
QY 242 SFLATCVNGCVWTVFHGAGSKTLGAPKGPITQMTYNVDODLVGWQAPPGARSMPTCTCGS 301
Db 259 SFLATCVNGCVWTVFHGAGSKTLGAPKGPITQMTYNVDQDLVGWQAPPGARSLTPTCTGS 318
QY 302 SDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGLLCPSGHAVGIFRAAVCTR 361
Db 319 SDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGLLCPSGHAVGIFRAAVCTR 378
QY 362 GVAKAVDFPVESMETTMR 380
Db 379 GVAKAVDFPVESMETTMR 397

RESULT 5

US-09-539-601-15
; Sequence 15, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; PRIOR FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 15
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-15

Query Match 95.0%; Score 1887; DB 4; Length 2201;
Best Local Similarity 93.4%; Pred. No. 5.1e-181;
Matches 354; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 2 LTLSPYKVLARLIWVLOQYFTRAEHLQVWIPPLNVRGGSDAVILLTCAIHPELIPT 61
Db 19 LTLSPHYKFLARLIWVLOQYFTRAEHLQVWIPPLNVRGGSDAVILLTCAIHPELIPT 78
QY 62 ITKLLAIIFGPMVLQAGITKVPYFVRAOGLIRACMLVRKAAGCHYVQMAFMKLAALTGT 121
Db 79 ITKLLAIILGPMVLQAGITKVPYFVRAGLIRACMLVRKVAGGHYVQMALMKLAALTGT 138
QY 122 YVVDHLTPLODWAHAGLRDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db 139 YVVDHLTPLRDWAHAGLRDLAVAVEPVFSDMETKVTITWGADTAACGDIISGLPVSARRG 198
QY 182 REILGPDNPFEGQWRLLAPITAYSQOTRGLLGCITSLTGDRDNQVGEVQVWSTATQ 241
Db 199 REIHLGPDNPFEGQWRLLAPITAYSQOTRGLLGCITSLTGDRDNQVGEVQVWSTATQ 258
QY 242 SFLATCVNGCVWTVFHGAGSKTLGAPKGPITQMTYNVDODLVGWQAPPGARSMPTCTCGS 301
Db 259 SFLATCVNGCVWTVFHGAGSKTLGAPKGPITQMTYNVDQDLVGWQAPPGARSLTPTCTGS 318
QY 302 SDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGLLCPSGHAVGIFRAAVCTR 361

RESULT 7

US-09-539-601-3
; Sequence 3, Application US/09539601C
; Patent No. 6630343

Db 319 SDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGLLCPSGHAVGIFRAAVCTR 378
QY 362 GVAKAVDFPVESMETTMR 380
Db 379 GVAKAVDFPVESMETTMR 397
RESULT 6
US-10-029-907-3
; Sequence 3, Application US/10029907
; Patent No. 6706874
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/029,907
; CURRENT FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-029-907-3

Query Match 95.0%; Score 1887; DB 4; Length 2201;
Best Local Similarity 93.4%; Pred. No. 5.1e-181;
Matches 354; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 2 LTLSPYKVLARLIWVLOQYFTRAEHLQVWIPPLNVRGGSDAVILLTCAIHPELIPT 61
Db 19 LTLSPHYKFLARLIWVLOQYFTRAEHLQVWIPPLNVRGGSDAVILLTCAIHPELIPT 78
QY 62 ITKLLAIIFGPMVLQAGITKVPYFVRAOGLIRACMLVRKAAGCHYVQMAFMKLAALTGT 121
Db 79 ITKLLAIILGPMVLQAGITKVPYFVRAGLIRACMLVRKVAGGHYVQMALMKLAALTGT 138
QY 122 YVVDHLTPLODWAHAGLRDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db 139 YVVDHLTPLRDWAHAGLRDLAVAVEPVFSDMETKVTITWGADTAACGDIISGLPVSARRG 198
QY 182 REILGPDNPFEGQWRLLAPITAYSQOTRGLLGCITSLTGDRDNQVGEVQVWSTATQ 241
Db 199 REIHLGPDNPFEGQWRLLAPITAYSQOTRGLLGCITSLTGDRDNQVGEVQVWSTATQ 258
QY 242 SFLATCVNGCVWTVFHGAGSKTLGAPKGPITQMTYNVDODLVGWQAPPGARSMPTCTCGS 301
Db 259 SFLATCVNGCVWTVFHGAGSKTLGAPKGPITQMTYNVDQDLVGWQAPPGARSLTPTCTGS 318
QY 302 SDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGLLCPSGHAVGIFRAAVCTR 361
Db 319 SDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGLLCPSGHAVGIFRAAVCTR 378
QY 362 GVAKAVDFPVESMETTMR 380
Db 379 GVAKAVDFPVESMETTMR 397


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Qy 302 SDLYLVRHADVIPIVRRRGRSGLSPRPVSYLKGSGGPGLLCPSGHVGIFRAAVCTR 361
Db 1128 SDLYLVRHADVIPIVRRRGRSGLSPRPVSYLKGSGGPGLLCPSGHVGIFRAAVCTR 1187
Qy 362 GVAKAVDFIPVESMETTMR 380
Db 1188 GVAKAVDFIPVESMETTMR 1206

RESULT 10
US-09-263-933-4
; Sequence 4, Application US/09263933
; Patent No. 6280940
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT FILING DATE: 1999-03-08
; EARLIER APPLICATION NUMBER: 09/129,611
; EARLIER FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
US-09-263-933-4
Query Match 94.7%; Score 1881; DB 3; Length 1692;
Best Local Similarity 93.1%; Pred. No. 1.4e-180;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;

Qy 2 LLTSLPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 61
Db 107 LLTSLPYKVLARLIWMLQYFTTAEHLHVITPPLNARGGRDAIILLMCAVHPELIFD 166
Qy 62 ITKLLAIFGLPMVLQAGITKVPYFVRAOGLIRACMLRVKAAGHYVQMAFMKLAALTGT 121
Db 167 ITKLLAIFGLPMVLQAGITKVPYFVRAOGLIRACMLRVKAAGHYVQMAFMKLAALTGT 226
Qy 122 VYDHLTPLODWAHAGLRDLAVAVEPVFSDMEYKIIITWAGDTAACGDIISGLPVSARRG 181
Db 227 YIYNHLTPLRDWAHAGLRDLAVAVEPVFSDMEYKIIITWAGDTAACGDIISGLPVSARRG 286
Qy 182 REILGPADNPEGOGWRLLAPITAYSQOTRGLLGCITSLTGRDNQVEGEVQVSTATQ 241
Db 287 KEILGPADNPEGOGWRLLAPITAYSQOTRGLLGCITSLTGRDNQVEGEVQVSTATQ 346
Qy 242 SFLATCNGVCWTYFHGAGSKTLGPKGITOMYTNVDQDLVGVQAPPGARSMTPTCTGGS 301
Db 347 SFLATCNGVCWTYFHGAGSKTLGPKGITOMYTNVDQDLVGVQAPPGARSMTPTCTGGS 406
Qy 302 SDLYLVRHADVIPIVRRRGRSGLSPRPVSYLKGSGGPGLLCPSGHVGIFRAAVCTR 361
Db 407 SDLYLVRHADVIPIVRRRGRSGLSPRPVSYLKGSGGPGLLCPSGHVGIFRAAVCTR 466
Qy 362 GVAKAVDFIPVESMETTMR 380
Db 467 GVAKAVDFIPVESMETTMR 485

RESULT 11
US-09-919-901-4
; Sequence 4, Application US/09919901
; Patent No. 6599738
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
```

```
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-919-901-4
Query Match 94.7%; Score 1881; DB 4; Length 1692;
Best Local Similarity 93.1%; Pred. No. 1.4e-180;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;

Qy 2 LLTSLPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 61
Db 107 LLTSLPYKVLARLIWMLQYFTTAEHLHVITPPLNARGGRDAIILLMCAVHPELIFD 166
Qy 62 ITKLLAIFGLPMVLQAGITKVPYFVRAOGLIRACMLRVKAAGHYVQMAFMKLAALTGT 121
Db 167 ITKLLAIFGLPMVLQAGITKVPYFVRAOGLIRACMLRVKAAGHYVQMAFMKLAALTGT 226
Qy 122 VYDHLTPLODWAHAGLRDLAVAVEPVFSDMEYKIIITWAGDTAACGDIISGLPVSARRG 181
Db 227 YIYNHLTPLRDWAHAGLRDLAVAVEPVFSDMEYKIIITWAGDTAACGDIISGLPVSARRG 286
Qy 182 REILGPADNPEGOGWRLLAPITAYSQOTRGLLGCITSLTGRDNQVEGEVQVSTATQ 241
Db 287 KEILGPADNPEGOGWRLLAPITAYSQOTRGLLGCITSLTGRDNQVEGEVQVSTATQ 346
Qy 242 SFLATCNGVCWTYFHGAGSKTLGPKGITOMYTNVDQDLVGVQAPPGARSMTPTCTGGS 301
Db 347 SFLATCNGVCWTYFHGAGSKTLGPKGITOMYTNVDQDLVGVQAPPGARSMTPTCTGGS 406
Qy 302 SDLYLVRHADVIPIVRRRGRSGLSPRPVSYLKGSGGPGLLCPSGHVGIFRAAVCTR 361
Db 407 SDLYLVRHADVIPIVRRRGRSGLSPRPVSYLKGSGGPGLLCPSGHVGIFRAAVCTR 466
Qy 362 GVAKAVDFIPVESMETTMR 380
Db 467 GVAKAVDFIPVESMETTMR 485

RESULT 12
US-10-191-966-4
; Sequence 4, Application US/10191966
; Patent No. 6790612
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT FILING DATE: 2002-07-10
; PRIOR APPLICATION NUMBER: US/09/263,933
; PRIOR FILING DATE: 1999-03-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
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; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-10-191-966-4

Query Match          94.7%; Score 1881; DB 4; Length 1692;
Best Local Similarity 93.1%; Pred. No. 1.4e-180;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;

Qy  2  LLTSPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGRDAIILLTCVHPELIFD 61
Db  107 LLTSPYKVLARLIWMLQYFTTAEHLHVMIPPLNARGGRDAIILLMCAVHPELIFD 166

Qy  62  ITKLLAIFGLPMLVLAQITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGT 121
Db  167 ITKLLAIFGLPMLVLAQITRVPYFVRAOGLIHACMLVRKVAGGHYVQMAFMKLGALTGT 226

Qy  122 VYDHLTPLODWAHAGRLDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db  227 YIYNHLTPLRDWAHAGRLDLAVAVEPVVFSDMETKIITWGADTAACGDIILGLPVSARRG 286

Qy  182 REILGPNADNPEGQWRLLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVSTATQ 241
Db  287 KEILGPADNLEGRWLLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVSTATQ 346

Qy  242 SFLATCNGVGVWTVFHGAGSKTLAGPKGPITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGS 301
Db  347 SFLATCNGVGVWTVYHAGSKTLAGPKGPITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGS 406

Qy  302 SDLVLRTHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTR 361
Db  407 SDLVLRTHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTR 466

Qy  362 GVAKAVDFIPVESMETTMR 380
Db  467 GVAKAVDFIPVESMETTMR 485

RESULT 13
US-09-263-933-2
; Sequence 2, Application US/09263933
; Patent No. 6280940
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/263,933
; EARLIER FILING DATE: 1999-03-08
; PRIOR FILING DATE: 1999-02-08
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 2307
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-263-933-2

Query Match          94.7%; Score 1881; DB 3; Length 2307;
Best Local Similarity 93.1%; Pred. No. 2.2e-180;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;

Qy  2  LLTSPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGRDAIILLTCVHPELIFD 61
Db  199 LLTSPYKVLARLIWMLQYFTTAEHLHVMIPPLNARGGRDAIILLMCAVHPELIFD 258

Qy  62  ITKLLAIFGLPMLVLAQITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGT 121
Db  259 ITKLLAIFGLPMLVLAQITRVPYFVRAOGLIHACMLVRKVAGGHYVQMAFMKLGALTGT 318

Qy  122 VYDHLTPLODWAHAGRLDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db  319 YIYNHLTPLRDWAHAGRLDLAVAVEPVVFSDMETKIITWGADTAACGDIILGLPVSARRG 378

Qy  182 REILGPNADNPEGQWRLLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVSTATQ 241
Db  379 KEILGPADNLEGRWLLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVSTATQ 438

Qy  242 SFLATCNGVGVWTVFHGAGSKTLAGPKGPITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGS 301
Db  439 SFLATCNGVGVWTVYHAGSKTLAGPKGPITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGS 498

RESULT 14
US-09-919-901-2
; Sequence 2, Application US/09919901
; Patent No. 6599738
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; CURRENT FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 2307
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-919-901-2

Query Match          94.7%; Score 1881; DB 4; Length 2307;
Best Local Similarity 93.1%; Pred. No. 2.2e-180;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;

Qy  2  LLTSPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGRDAIILLTCVHPELIFD 61
Db  199 LLTSPYKVLARLIWMLQYFTTAEHLHVMIPPLNARGGRDAIILLMCAVHPELIFD 258

Qy  62  ITKLLAIFGLPMLVLAQITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTGT 121
Db  259 ITKLLAIFGLPMLVLAQITRVPYFVRAOGLIHACMLVRKVAGGHYVQMAFMKLGALTGT 318

Qy  122 VYDHLTPLODWAHAGRLDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db  319 YIYNHLTPLRDWAHAGRLDLAVAVEPVVFSDMETKIITWGADTAACGDIILGLPVSARRG 378

Qy  182 REILGPNADNPEGQWRLLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVSTATQ 241
Db  379 KEILGPADNLEGRWLLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVSTATQ 438

Qy  242 SFLATCNGVGVWTVFHGAGSKTLAGPKGPITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGS 301
Db  439 SFLATCNGVGVWTVYHAGSKTLAGPKGPITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGS 498
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QY 302 SDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTR 361
|||
Db 499 SDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTR 558
|||
QY 362 GVAKAVDFIPVESMETTMR 380
|||
Db 559 GVAKAVDFIPVESMETTMR 577
|||

RESULT 15

US-10-191-966-2
; Sequence 2, Application US/10191966
; Patent No. 6790612
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191,966
; CURRENT FILING DATE: 2002-07-10
; PRIOR APPLICATION NUMBER: US/09/263,933
; PRIOR FILING DATE: 1999-03-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 2307
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: :
US-10-191-966-2

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Best Local Similarity 93.1%; Pred. No. 2.2e-180;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;
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Db 199 LLTSPYKVFARLIWLOYLITRVEAHLQVWIPPLNVGRGRDAIILLTCAVHPELIPD 258
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QY 62 ITKLLAIFGPLMVLOAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121
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QY 122 YVYDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
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Db 319 YIYNHLTPLRDWAHAGLRDLAVAVEPVIFSDMETKIITWGADTAACGDIILGLPVSARRG 378
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Db 439 SFLATCVNGVCWTVYHAGAGSKTLGAPKGPITOMYTNVDQDLVGVQAPPGARSLTPCTCGS 498
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QY 302 SDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTR 361
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QY 362 GVAKAVDFIPVESMETTMR 380
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Db 559 GVAKAVDFIPVESMETTMR 577
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Search completed: May 26, 2005, 22:03:41
Job time : 24.0543 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: May 26, 2005, 21:58:09 ; Search time 66.1628 Seconds
(without alignments)
1981.317 Million cell updates/sec

Title: US-10-650-585-12
Perfect score: 1987
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Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1462099 seqs, 344972447 residues

Total number of hits satisfying chosen parameters: 1462099

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:
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14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
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20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	1987	100.0	380	15	US-10-650-585-12
3	1987	100.0	393	13	US-10-017-736-11
4	1987	100.0	393	15	US-10-650-585-11
5	1987	100.0	409	13	US-10-017-736-2
6	1987	100.0	409	15	US-10-650-585-2
7	1887	95.0	2201	13	US-10-029-907-3
8	1887	95.0	2201	14	US-10-309-561-3
9	1887	95.0	2201	16	US-10-789-355-3
10	1887	95.0	3010	15	US-10-467-000-1
11	1881	94.7	1692	10	US-09-919-901-4
12	1881	94.7	1692	14	US-10-191-966-4
13	1881	94.7	2307	10	US-09-919-901-2

14	1881	94.7	2307	14	US-10-191-966-2	Sequence 2, Appli
15	1878	94.5	1692	10	US-09-919-901-11	Sequence 11, Appl
16	1878	94.5	1692	14	US-10-191-966-11	Sequence 11, Appl
17	1878	94.5	2307	10	US-09-919-901-9	Sequence 9, Appli
18	1878	94.5	2307	14	US-10-191-966-9	Sequence 9, Appli
19	1869	94.1	1692	10	US-09-919-901-18	Sequence 18, Appl
20	1869	94.1	1692	14	US-10-191-966-18	Sequence 18, Appl
21	1869	94.1	2307	10	US-09-919-901-16	Sequence 16, Appl
22	1869	94.1	2307	14	US-10-191-966-16	Sequence 16, Appl
23	1863	93.8	3010	16	US-10-333-449A-34	Sequence 34, Appl
24	1842	92.7	352	13	US-10-017-736-13	Sequence 13, Appl
25	1842	92.7	352	15	US-10-650-585-13	Sequence 13, Appl
26	1823	91.7	2201	13	US-10-085-476-2	Sequence 2, Appli
27	1778	89.5	341	13	US-10-017-736-14	Sequence 14, Appl
28	1778	89.5	341	15	US-10-650-585-14	Sequence 14, Appl
29	1717	86.4	3011	9	US-09-742-659-4	Sequence 4, Appli
30	1717	86.4	3011	10	US-09-891-894-3	Sequence 3, Appli
31	1717	86.4	3011	14	US-10-184-150-3	Sequence 3, Appli
32	1717	86.4	3011	15	US-10-328-997-3	Sequence 3, Appli
33	1717	86.4	3012	9	US-09-238-076-2	Sequence 2, Appli
34	1717	86.4	3012	10	US-09-995-937-2	Sequence 2, Appli
35	1717	86.4	3012	10	US-09-917-563-2	Sequence 2, Appli
36	1715	86.3	3011	9	US-09-916-359-2	Sequence 2, Appli
37	1715	86.3	3011	15	US-10-296-734-406	Sequence 406, App
38	1715	86.3	3011	16	US-10-445-724-2	Sequence 2, Appli
39	1713	86.2	3011	9	US-09-238-076-20	Sequence 20, Appl
40	1713	86.2	3011	10	US-09-995-937-20	Sequence 20, Appl
41	1713	86.2	3011	10	US-09-917-563-20	Sequence 20, Appl
42	1710	86.1	2894	9	US-09-941-611-23	Sequence 23, Appl
43	1710	86.1	2894	14	US-10-044-995-23	Sequence 23, Appl
44	1710	86.1	2894	16	US-10-822-871-23	Sequence 23, Appl
45	1710	86.1	3011	9	US-09-952-572-9	Sequence 9, Appli

ALIGNMENTS

RESULT 1
US-10-017-736-12
; Sequence 12, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-12

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Best Local Similarity		100.0%;	Pred. No. 2.9e-187;		
Matches 380;		Conservative	0;	Mismatches	0;
				Indels	0;
				Gaps	0;
QY	1	ALLTSPYKVLARLIWLLQVLYITRVEAHQVWIPPLNVRGGRDAIILLTCAVHPLEIF	60		
Db	1	ALLTSPYKVLARLIWLLQVLYITRVEAHQVWIPPLNVRGGRDAIILLTCAVHPLEIF	60		
QY	61	DIITKLLAIFGPMVLVQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQVAFKLAALTG	120		
Db	61	DIITKLLAIFGPMVLVQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQVAFKLAALTG	120		
QY	121	TYVYDHLTFLQDWAHAGLRDLAVAVPEVIFSDMEVKIITWGADTAACGDIISGLPVSARR	180		
Db	121	TYVYDHLTFLQDWAHAGLRDLAVAVPEVIFSDMEVKIITWGADTAACGDIISGLPVSARR	180		

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QY 181 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVSTAT 240
Db 181 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVSTAT 240
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Db 241 QSFLLATCVNGVCVTFVHGAGSKTLAGPKGPIQMTYTNVDQDLVGVQAPPGARSMTPTCTG 300
QY 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRVSVYKSGSGPLLCPSGHAVGIFRAAVCT 360
Db 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRVSVYKSGSGPLLCPSGHAVGIFRAAVCT 360
QY 361 RGVAKAVDFIPVESMETTMR 380
Db 361 RGVAKAVDFIPVESMETTMR 380

RESULT 2
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; Sequence 12, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-12

Query Match 100.0%; Score 1987; DB 15; Length 380;
Best Local Similarity 100.0%; Pred. No. 2.9e-187;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 121 TYVVDHLTLPQDWAHAGRLDLAVAVEPVIIFSDEVKIITWGADTAACGDIISGLPVSARR 180
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RESULT 3
US-10-650-585-12
; Sequence 12, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-12

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Best Local Similarity 100.0%; Pred. No. 2.9e-187;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 61 DITKLLAIFGLPLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTG 120
Db 61 DITKLLAIFGLPLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTG 120
QY 121 TYVVDHLTLPQDWAHAGRLDLAVAVEPVIIFSDEVKIITWGADTAACGDIISGLPVSARR 180
Db 121 TYVVDHLTLPQDWAHAGRLDLAVAVEPVIIFSDEVKIITWGADTAACGDIISGLPVSARR 180
QY 181 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVSTAT 240
Db 181 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVSTAT 240
QY 241 QSFLLATCVNGVCVTFVHGAGSKTLAGPKGPIQMTYTNVDQDLVGVQAPPGARSMTPTCTG 300
Db 241 QSFLLATCVNGVCVTFVHGAGSKTLAGPKGPIQMTYTNVDQDLVGVQAPPGARSMTPTCTG 300
QY 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRVSVYKSGSGPLLCPSGHAVGIFRAAVCT 360
Db 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRVSVYKSGSGPLLCPSGHAVGIFRAAVCT 360
QY 361 RGVAKAVDFIPVESMETTMR 380
Db 361 RGVAKAVDFIPVESMETTMR 380
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; Publication No. US20020192640A1
; GENERAL INFORMATION:
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; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-11

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Best Local Similarity 100.0%; Pred. No. 3.1e-187;
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QY 61 DITKLLAIFGLPLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTG 120
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QY 121 TYVVDHLTLPQDWAHAGRLDLAVAVEPVIIFSDEVKIITWGADTAACGDIISGLPVSARR 180
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Db 194 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVSTAT 253
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QY 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRVSVYKSGSGPLLCPSGHAVGIFRAAVCT 360
Db 314 SSDLYLVTRHADVIPVRRRGDSRGLSPRVSVYKSGSGPLLCPSGHAVGIFRAAVCT 373
QY 361 RGVAKAVDFIPVESMETTMR 380
Db 374 RGVAKAVDFIPVESMETTMR 393

RESULT 4
US-10-650-585-11
; Sequence 11, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-11
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Query Match 100.0%; Score 1987; DB 15; Length 393;
Best Local Similarity 100.0%; Pred. No. 3.1e-187;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 14 ALLTSLPYKVLARLIWLYLITRVEAHLQWIPPLNVRGGRDAIILLTCAVHPLELIF 73
QY 61 DITKLLAIFGLPLVLOAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTG 120
DB 74 DITKLLAIFGLPLVLOAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTG 133
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DB 194 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDNQVEGEVQVSTAT 253
QY 241 QSFATCVNGVCWTVFVGAGSKTLAGPKGPIITQMTYNVDQDLVGMQAPPGARSMTPCTCG 300
DB 254 QSFATCVNGVCWTVFVGAGSKTLAGPKGPIITQMTYNVDQDLVGMQAPPGARSMTPCTCG 313
QY 301 SSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPPLLCPSGHAVGIFRAAVCT 360
DB 314 SSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPPLLCPSGHAVGIFRAAVCT 373
QY 361 RGAKAVDFIPVESMETTMR 380
DB 374 RGAKAVDFIPVESMETTMR 393

RESULT 5
US-10-017-736-2
; Sequence 2, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-2

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Best Local Similarity 100.0%; Pred. No. 3.2e-187;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 18 ALLTSLPYKVLARLIWLYLITRVEAHLQWIPPLNVRGGRDAIILLTCAVHPLELIF 77
QY 61 DITKLLAIFGLPLVLOAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTG 120
DB 78 DITKLLAIFGLPLVLOAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTG 137
QY 121 TTYVDHLTFLQDWAHAGLRDLAVAVEPFIISDMEVKIITWGADTAACGDIISGLPVSARR 180
DB 138 TTYVDHLTFLQDWAHAGLRDLAVAVEPFIISDMEVKIITWGADTAACGDIISGLPVSARR 197
QY 181 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDNQVEGEVQVSTAT 240
DB 198 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDNQVEGEVQVSTAT 257
QY 241 QSFATCVNGVCWTVFVGAGSKTLAGPKGPIITQMTYNVDQDLVGMQAPPGARSMTPCTCG 300
DB 258 QSFATCVNGVCWTVFVGAGSKTLAGPKGPIITQMTYNVDQDLVGMQAPPGARSMTPCTCG 317
QY 301 SSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPPLLCPSGHAVGIFRAAVCT 360
DB 318 SSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPPLLCPSGHAVGIFRAAVCT 377
QY 361 RGAKAVDFIPVESMETTMR 380
DB 378 RGAKAVDFIPVESMETTMR 397

RESULT 7
US-10-029-907-3
; Sequence 3, Application US/10029907
; Publication No. US20020142350A1

QY 241 QSFATCVNGVCWTVFVGAGSKTLAGPKGPIITQMTYNVDQDLVGMQAPPGARSMTPCTCG 300
DB 258 QSFATCVNGVCWTVFVGAGSKTLAGPKGPIITQMTYNVDQDLVGMQAPPGARSMTPCTCG 317
QY 301 SSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPPLLCPSGHAVGIFRAAVCT 360
DB 318 SSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPPLLCPSGHAVGIFRAAVCT 377
QY 361 RGAKAVDFIPVESMETTMR 380
DB 378 RGAKAVDFIPVESMETTMR 397

RESULT 6
US-10-650-585-2
; Sequence 2, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-2

Query Match 100.0%; Score 1987; DB 15; Length 409;
Best Local Similarity 100.0%; Pred. No. 3.2e-187;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALLTSLPYKVLARLIWLYLITRVEAHLQWIPPLNVRGGRDAIILLTCAVHPLELIF 60
DB 18 ALLTSLPYKVLARLIWLYLITRVEAHLQWIPPLNVRGGRDAIILLTCAVHPLELIF 77
QY 61 DITKLLAIFGLPLVLOAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTG 120
DB 78 DITKLLAIFGLPLVLOAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTG 137
QY 121 TTYVDHLTFLQDWAHAGLRDLAVAVEPFIISDMEVKIITWGADTAACGDIISGLPVSARR 180
DB 138 TTYVDHLTFLQDWAHAGLRDLAVAVEPFIISDMEVKIITWGADTAACGDIISGLPVSARR 197
QY 181 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDNQVEGEVQVSTAT 240
DB 198 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDNQVEGEVQVSTAT 257
QY 241 QSFATCVNGVCWTVFVGAGSKTLAGPKGPIITQMTYNVDQDLVGMQAPPGARSMTPCTCG 300
DB 258 QSFATCVNGVCWTVFVGAGSKTLAGPKGPIITQMTYNVDQDLVGMQAPPGARSMTPCTCG 317
QY 301 SSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPPLLCPSGHAVGIFRAAVCT 360
DB 318 SSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPPLLCPSGHAVGIFRAAVCT 377
QY 361 RGAKAVDFIPVESMETTMR 380
DB 378 RGAKAVDFIPVESMETTMR 397

RESULT 7
US-10-029-907-3
; Sequence 3, Application US/10029907
; Publication No. US20020142350A1

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; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; TITLE OF INVENTION: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/029,907
; CURRENT FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRN
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
; US-10-029-907-3

Query Match          95.0%; Score 1887; DB 13; Length 2201;
Best Local Similarity 93.4%; Pred. No. 2.4e-176;
Matches 354; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 2 LLTSPYKVLARLIWLIQYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 61
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 19 LLTSPHYKFLARLIWLIQYFITRAEHLQVWIPPLNVRGGRDAVILLTCAIHPELI 78
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 62 ITKLLAIFGLMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAAL 121
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 79 ITKLLAILGLMVLQAGITKVPYFVRAHGLIRACMLVRKVGCHYVQMALMKLAAL 138
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 122 YVVDHLTPLOQWHAHAGRLDAVAPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 139 YVVDHLTPLRDWAHAGRLDAVAPEVVFSDMETKVTITWGADTAACGDIILGLPVSARRG 198
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 182 REILLGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDNQVEGEVQVWSTATQ 241
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 199 REIHLPADSLQGWRLAPITAYSQOTRGLGCIITSLTGRDNQVEGEVQVWSTATQ 258
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 242 SFLATCVNGVCWTVFHGAGSKTLAGPKGPIQMTYTNVDQDLVGWQAPPGARSLTPCTCGS 301
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 259 SFLATCVNGVCWTVYHAGSKTLAGPKGPIQMTYTNVDQDLVGWQAPPGARSLTPCTCGS 318
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 302 SDLYLVRHADVIPVRRGDSRGLSPRPVSVYLGSSGGPLLCPSGHVGIFRAAVCTR 361
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 319 SDLYLVRHADVIPVRRGDSRGLSPRPVSVYLGSSGGPLLCPSGHVGIFRAAVCTR 378
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 362 GVAKAVDFIPVESMETTMR 380
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 379 GVAKAVDFIPVESMETTMR 397
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

RESULT 8
US-10-309-561-3
; Sequence 3, Application US/10309561
; Publication No. US20030148348A1
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; TITLE OF INVENTION: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/309,561
; CURRENT FILING DATE: 2002-12-04
; PRIOR APPLICATION NUMBER: US/10/029,907
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25

; US-10-789-355-3
; Sequence 3, Application US/10789355
; Publication No. US20040180333A1
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; TITLE OF INVENTION: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/789,355
; CURRENT FILING DATE: 2004-02-27
; PRIOR APPLICATION NUMBER: US/10/029,907
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRN
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
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; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-789-355-3

Query Match
Best Local Similarity 95.0%; Score 1887; DB 16; Length 2201;
Matches 354; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 2 LLTLPYKVLARLIWLVQYLTIRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 61
DB 19 LLTLPYKVLARLIWLVQYLTIRVEAHLQVWIPPLNVRGGRDAIILLTCAHPELIFT 78
QY 62 ITKLLAIFGLPMLVQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121
DB 79 ITKLLAIFGLPMLVQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 138
QY 122 YVVDHLTPLOQWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
DB 139 YVVDHLTPLOQWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 198
QY 182 REILGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDKNOVEGEVQVSTATQ 241
DB 199 REILGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDKNOVEGEVQVSTATQ 258
QY 242 SFLATCVNGVCWTVFHGAGSKTLGPKGPIITOMYTNVDQDLVGVQAPPGARSMTPTCTCGS 301
DB 259 SFLATCVNGVCWTVFHGAGSKTLGPKGPIITOMYTNVDQDLVGVQAPPGARSMTPTCTCGS 318
QY 302 SDLYLVTRHADVIPVRRRGRSGLSPRVSVYLGSSGGPLLCPSGHAVGIFRAAVCTR 361
DB 319 SDLYLVTRHADVIPVRRRGRSGLSPRVSVYLGSSGGPLLCPSGHAVGIFRAAVCTR 378
QY 362 GVAKAVDFIPVESMETTMR 380
DB 379 GVAKAVDFIPVESMETTMR 397

RESULT 10
US-10-467-000-1
; Sequence 1, Application US/10467000
; Publication No. US20040067486A1
; GENERAL INFORMATION:
; APPLICANT: De Francesco, Raffaele
; APPLICANT: Pacnessa, Giacomo
; TITLE OF INVENTION: HEPATITIS C VIRUS REPLICONS AND REPLICON
; FILE REFERENCE: ITR0003P
; CURRENT APPLICATION NUMBER: US/10/467,000
; PRIOR FILING DATE: 2003-07-21
; PRIOR APPLICATION NUMBER: PCT/EP02/00526
; PRIOR FILING DATE: 2002-01-16
; PRIOR APPLICATION NUMBER: 60/263,479
; PRIOR FILING DATE: 2001-01-23
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Fast-Seq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Con 1 HCV isolate nucleic acid
US-10-467-000-1

Query Match
Best Local Similarity 95.0%; Score 1887; DB 15; Length 3010;
Matches 354; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 2 LLTLPYKVLARLIWLVQYLTIRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 61
DB 828 LLTLPYKVLARLIWLVQYLTIRVEAHLQVWIPPLNVRGGRDAIILLTCAHPELIFT 887
QY 62 ITKLLAIFGLPMLVQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121

; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-789-355-3

Query Match
Best Local Similarity 95.0%; Score 1887; DB 16; Length 2201;
Matches 354; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 2 LLTLPYKVLARLIWLVQYLTIRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 61
DB 19 LLTLPYKVLARLIWLVQYLTIRVEAHLQVWIPPLNVRGGRDAIILLTCAHPELIFT 78
QY 62 ITKLLAIFGLPMLVQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121
DB 79 ITKLLAIFGLPMLVQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 138
QY 122 YVVDHLTPLOQWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
DB 139 YVVDHLTPLOQWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 198
QY 182 REILGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDKNOVEGEVQVSTATQ 241
DB 199 REILGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDKNOVEGEVQVSTATQ 258
QY 242 SFLATCVNGVCWTVFHGAGSKTLGPKGPIITOMYTNVDQDLVGVQAPPGARSMTPTCTCGS 301
DB 259 SFLATCVNGVCWTVFHGAGSKTLGPKGPIITOMYTNVDQDLVGVQAPPGARSMTPTCTCGS 318
QY 302 SDLYLVTRHADVIPVRRRGRSGLSPRVSVYLGSSGGPLLCPSGHAVGIFRAAVCTR 361
DB 319 SDLYLVTRHADVIPVRRRGRSGLSPRVSVYLGSSGGPLLCPSGHAVGIFRAAVCTR 378
QY 362 GVAKAVDFIPVESMETTMR 380
DB 379 GVAKAVDFIPVESMETTMR 397

RESULT 11
US-09-919-901-4
; Sequence 4, Application US/09919901
; Publication No. US20030082518A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; CURRENT FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: Patent in Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-919-901-4

Query Match
Best Local Similarity 94.7%; Score 1881; DB 10; Length 1692;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;

QY 2 LLTLPYKVLARLIWLVQYLTIRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 61
DB 107 LLTLPYKVLARLIWLVQYLTIRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 166
QY 62 ITKLLAIFGLPMLVQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121
DB 167 ITKLLAIFGLPMLVQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 226
QY 122 YVVDHLTPLOQWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
DB 227 YVVDHLTPLOQWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 286
QY 182 REILGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDKNOVEGEVQVSTATQ 241
DB 287 REILGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDKNOVEGEVQVSTATQ 346
QY 242 SFLATCVNGVCWTVFHGAGSKTLGPKGPIITOMYTNVDQDLVGVQAPPGARSMTPTCTCGS 301
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Db 347 SFLATCNGVCWTVYHAGSKTLAGPKGPTQMTYTNVDQDLVGMQAPPGARSLTPCTCGS 406
Qy 302 SDLYLVTRHADVPVRRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTR 361
Db 407 SDLYLVTRHADVPVRRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTR 466
Qy 362 GVAKAVDFIPVESMETTMR 380
Db 467 GVAKAVDFIPVESMETTMR 485

RESULT 12
US-10-191-966-4
; Sequence 4, Application US/10191966
; Publication No. US20030175692A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191.966
; PRIOR FILING DATE: 2002-07-10
; PRIOR FILING DATE: 1999-03-08
; PRIOR FILING DATE: 1999-03-08
; PRIOR FILING DATE: 1999-03-08
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: :
US-10-191-966-4

Query Match 94.7%; Score 1881; DB 14; Length 1692;
Best Local Similarity 93.1%; Pred. No. 6.5e-176;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;

Qy 2 LLTSLPYKVLARLIWLIQVLTIRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 61
Db 107 LLTSLPYKVLARLIWLIQVLTIRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 166
Qy 62 ITKLLLAIFGPELMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121
Db 167 ITKLLLAIFGPELMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGT 226
Qy 122 YVYDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db 227 YVYDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 286
Qy 182 REILGPADNFEQGGWRLLAPITAYSQOTRGLLCIITSLTGRDKNQVEGEVQVSTATQ 241
Db 287 KEILGPADNFEQGGWRLLAPITAYSQOTRGLLCIITSLTGRDKNQVEGEVQVSTATQ 346
Qy 242 SFLATCNGVCWTVYHAGSKTLAGPKGPTQMTYTNVDQDLVGMQAPPGARSLTPCTCGS 301
Db 347 SFLATCNGVCWTVYHAGSKTLAGPKGPTQMTYTNVDQDLVGMQAPPGARSLTPCTCGS 406
Qy 302 SDLYLVTRHADVPVRRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTR 361
Db 407 SDLYLVTRHADVPVRRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTR 466
Qy 362 GVAKAVDFIPVESMETTMR 380
Db 467 GVAKAVDFIPVESMETTMR 485

RESULT 13
US-09-919-901-2

; Sequence 2, Application US/09919901
; Publication No. US20030082518A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919.901
; CURRENT FILING DATE: 2001-08-02
; PRIOR FILING DATE: 1999-02-08
; PRIOR FILING DATE: 1999-02-08
; PRIOR FILING DATE: 1999-02-08
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 2307
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: :
US-09-919-901-2

Query Match 94.7%; Score 1881; DB 10; Length 2307;
Best Local Similarity 93.1%; Pred. No. 9.9e-176;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;

Qy 2 LLTSLPYKVLARLIWLIQVLTIRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 61
Db 199 LLTSLPYKVLARLIWLIQVLTIRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 258
Qy 62 ITKLLLAIFGPELMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121
Db 259 ITKLLLAIFGPELMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGT 318
Qy 122 YVYDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db 319 YVYDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 378
Qy 182 REILGPADNFEQGGWRLLAPITAYSQOTRGLLCIITSLTGRDKNQVEGEVQVSTATQ 241
Db 379 KEILGPADNFEQGGWRLLAPITAYSQOTRGLLCIITSLTGRDKNQVEGEVQVSTATQ 438
Qy 242 SFLATCNGVCWTVYHAGSKTLAGPKGPTQMTYTNVDQDLVGMQAPPGARSLTPCTCGS 301
Db 439 SFLATCNGVCWTVYHAGSKTLAGPKGPTQMTYTNVDQDLVGMQAPPGARSLTPCTCGS 498
Qy 302 SDLYLVTRHADVPVRRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTR 361
Db 499 SDLYLVTRHADVPVRRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTR 558
Qy 362 GVAKAVDFIPVESMETTMR 380
Db 559 GVAKAVDFIPVESMETTMR 577

RESULT 14
US-10-191-966-2
; Sequence 2, Application US/10191966
; Publication No. US20030175692A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191.966
; CURRENT FILING DATE: 2002-07-10
; PRIOR FILING DATE: 1999-03-08

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OM protein - protein search, using sw model

Run on: May 26, 2005, 21:44:29 ; Search time 20.4292 Seconds
(without alignments)

1286.219 Million cell updates/sec

Title: US-10-650-585-13

Perfect score: 1842

Sequence: 1 AHQVWIPPLNVRGGRDAII.....RGVAKAVDFIPVSEMTTMR 352

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents AA:*
1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep.*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep.*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep.*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep.*
5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep.*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1842	100.0	352	4	US-10-017-736C-13
2	1842	100.0	380	4	US-10-017-736C-12
3	1842	100.0	393	4	US-10-017-736C-11
4	1842	100.0	409	4	US-10-017-736C-2
5	1778	96.5	341	4	US-10-017-736C-14
6	1766	95.9	2201	4	US-09-539-601-6
7	1766	95.9	2201	4	US-09-539-601-15
8	1766	95.9	2201	4	US-10-029-907-3
9	1766	95.9	3010	4	US-09-539-601-3
10	1766	95.9	3010	4	US-09-539-601-21
11	1766	95.9	3010	4	US-09-539-601-27
12	1759	95.5	3010	4	US-09-539-601-33
13	1757	95.4	1692	3	US-09-263-933-4
14	1757	95.4	1692	4	US-09-919-901-4
15	1757	95.4	1692	4	US-10-191-966-4
16	1757	95.4	2307	3	US-09-263-933-2
17	1757	95.4	2307	4	US-09-919-901-2
18	1757	95.4	2307	4	US-10-191-966-2
19	1754	95.2	1692	3	US-09-263-933-11
20	1754	95.2	1692	4	US-09-919-901-11
21	1754	95.2	1692	4	US-10-191-966-11
22	1754	95.2	2307	3	US-09-263-933-9
23	1754	95.2	2307	4	US-09-919-901-9
24	1754	95.2	2307	4	US-10-191-966-9
25	1748	94.9	3010	3	US-09-014-416-3
26	1745	94.7	1692	3	US-09-263-933-18
27	1745	94.7	1692	4	US-09-919-901-18
					Sequence 13, Appl
					Sequence 12, Appl
					Sequence 11, Appl
					Sequence 2, Appl
					Sequence 14, Appl
					Sequence 6, Appl
					Sequence 15, Appl
					Sequence 3, Appl
					Sequence 3, Appl
					Sequence 21, Appl
					Sequence 27, Appl
					Sequence 33, Appl
					Sequence 4, Appl
					Sequence 4, Appl
					Sequence 4, Appl
					Sequence 2, Appl
					Sequence 2, Appl
					Sequence 2, Appl
					Sequence 2, Appl
					Sequence 11, Appl
					Sequence 11, Appl
					Sequence 9, Appl
					Sequence 9, Appl
					Sequence 9, Appl
					Sequence 3, Appl
					Sequence 18, Appl
					Sequence 18, Appl

28	1745	94.7	1692	4	US-10-191-966-18	Sequence 18, Appl
29	1745	94.7	2307	3	US-09-263-933-16	Sequence 16, Appl
30	1745	94.7	2307	4	US-09-919-901-16	Sequence 16, Appl
31	1745	94.7	2307	4	US-10-191-966-16	Sequence 16, Appl
32	1699	92.2	2013	1	US-08-324-977-12	Sequence 12, Appl
33	1699	92.2	2013	2	US-08-384-616-12	Sequence 12, Appl
34	1699	92.2	2013	2	US-08-904-686A-12	Sequence 12, Appl
35	1699	92.2	2013	3	US-09-315-850-12	Sequence 12, Appl
36	1699	92.2	2201	3	US-08-952-981A-2	Sequence 2, Appl
37	1699	92.2	2620	1	US-08-324-977-32	Sequence 32, Appl
38	1699	92.2	2620	2	US-08-384-616-32	Sequence 32, Appl
39	1699	92.2	2620	2	US-08-904-686A-32	Sequence 32, Appl
40	1699	92.2	2620	3	US-09-315-850-32	Sequence 32, Appl
41	1699	92.2	2621	1	US-08-324-977-36	Sequence 36, Appl
42	1699	92.2	2621	2	US-08-384-616-36	Sequence 36, Appl
43	1699	92.2	2621	2	US-08-904-686A-36	Sequence 36, Appl
44	1699	92.2	2621	3	US-09-315-850-36	Sequence 36, Appl
45	1699	92.2	3010	1	US-08-324-977-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1

US-10-017-736C-13
; Sequence 13, Application US/10017736C
; Patent No. 6815159

GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane

; APPLICANT: Lamarre, Daniel

; APPLICANT: Maurice, Roger

; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Armin

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease

; FILE REFERENCE: 13/082

; CURRENT APPLICATION NUMBER: US/10/017,736C

; CURRENT FILING DATE: 2001-12-14

; PRIOR APPLICATION NUMBER: 60/256,031

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 13

; LENGTH: 352

; TYPE: PRT

; ORGANISM: HCV

US-10-017-736C-13

Query Match 100.0%; Score 1842; DB 4; Length 352;
Best Local Similarity 100.0%; Pred. No. 1.8e-179;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	AHQQVWIPPLNVRGGRDAIIILLTCAVHPELIFDITKLLLAIFGRLMVLQAGITKVPYFVR	60
DB	1	AHQQVWIPPLNVRGGRDAIIILLTCAVHPELIFDITKLLLAIFGRLMVLQAGITKVPYFVR	60
QY	61	AQGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTFLQDWAHAGRLDLAVAVEPV	120
DB	61	AQGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTFLQDWAHAGRLDLAVAVEPV	120
QY	121	IFSDMEVKIITWGAADTAACGDIISGLPVSARRGREILLGPDNFEQGWLLAPITAYSQ	180
DB	121	IFSDMEVKIITWGAADTAACGDIISGLPVSARRGREILLGPDNFEQGWLLAPITAYSQ	180
QY	181	QTRGLLGCIITSTLTGRDKNOQVEGVQVWSTATQVFATCVNGVCTVTFHGAGSKTLGAPK	240
DB	181	QTRGLLGCIITSTLTGRDKNOQVEGVQVWSTATQVFATCVNGVCTVTFHGAGSKTLGAPK	240
QY	241	GPITQMTYTNVDQLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRREGDSRGSLLS	300
DB	241	GPITQMTYTNVDQLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRREGDSRGSLLS	300
QY	301	PRPVSYLKSGSGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR	352

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Db 301 PRPVSYLKGSSGGPLLCPGSHAVGIFRAAAVCTRGVAKAVDFIPVESMETTMR 352
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-11

Query Match 100.0%; Score 1842; DB 4; Length 393;
Best Local Similarity 100.0%; Pred. No. 2.2e-179;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 2
US-10-017-736C-12
; Sequence 12, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-12

Query Match 100.0%; Score 1842; DB 4; Length 380;
Best Local Similarity 100.0%; Pred. No. 2e-179;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AHLQVWIPPLNVRGGRDAIILLTCAVHPELIDITKLLAIFGLPMLVQLAGITKVPYFVR 60
Db 29 AHLQVWIPPLNVRGGRDAIILLTCAVHPELIDITKLLAIFGLPMLVQLAGITKVPYFVR 88
Qy 61 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDVAVEPV 120
Db 89 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDVAVEPV 148
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGOGWRLLAPITAYSQ 180
Db 149 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGOGWRLLAPITAYSQ 208
Qy 181 QTRGLLGCIIITSLTGRDKNQVEGVQVSTATQSFATCVNGVCWTVFHHGAGSKTLGPK 240
Db 209 QTRGLLGCIIITSLTGRDKNQVEGVQVSTATQSFATCVNGVCWTVFHHGAGSKTLGPK 269
Qy 241 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 300
Db 269 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 328
Qy 301 PRPVSYLKGSSGGPLLCPGSHAVGIFRAAAVCTRGVAKAVDFIPVESMETTMR 352
Db 329 PRPVSYLKGSSGGPLLCPGSHAVGIFRAAAVCTRGVAKAVDFIPVESMETTMR 380

RESULT 3
US-10-017-736C-11
; Sequence 11, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25

Qy 1 AHLQVWIPPLNVRGGRDAIILLTCAVHPELIDITKLLAIFGLPMLVQLAGITKVPYFVR 60
Db 46 AHLQVWIPPLNVRGGRDAIILLTCAVHPELIDITKLLAIFGLPMLVQLAGITKVPYFVR 105
Qy 61 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDVAVEPV 120
Db 106 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDVAVEPV 165
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGOGWRLLAPITAYSQ 180
Db 342 PRPVSYLKGSSGGPLLCPGSHAVGIFRAAAVCTRGVAKAVDFIPVESMETTMR 393

RESULT 4
US-10-017-736C-2
; Sequence 2, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-2

Query Match 100.0%; Score 1842; DB 4; Length 409;
Best Local Similarity 100.0%; Pred. No. 2.3e-179;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AHLQVWIPPLNVRGGRDAIILLTCAVHPELIDITKLLAIFGLPMLVQLAGITKVPYFVR 60
Db 46 AHLQVWIPPLNVRGGRDAIILLTCAVHPELIDITKLLAIFGLPMLVQLAGITKVPYFVR 105
Qy 61 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDVAVEPV 120
Db 106 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDVAVEPV 165
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGOGWRLLAPITAYSQ 180
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Db 166 IFSDMEVKIITWGADTTACGDIISGLPVSARRGREIILGPADNPEGGQWRLAPITAYSQ 225
Qy 181 QTRGLLGCIIITSLGRDNQVEGEVQVVSSTATQSFLLATCVNGVCWTVFHGAGSKTLGPK 240
Db 226 QTRGLLGCIIITSLGRDNQVEGEVQVVSSTATQSFLLATCVNGVCWTVFHGAGSKTLGPK 285
Qy 241 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 300
Db 286 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 345
Qy 301 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 346 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 5
US-10-017-736C-14
; Sequence 14, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: Fast-Seq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736C-14

Query Match 96.5%; Score 1778; DB 4; Length 341;
Best Local Similarity 100.0%; Pred. No. 5.9e-173; Indels 0; Gaps 0;
Matches 341; Conservative 0; Mismatches 0;

Qy 12 VRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLQAGITKVPYFVRAQGLIRACMLV 71
Db 1 VRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLQAGITKVPYFVRAQGLIRACMLV 60
Qy 72 RKAAGHYVQMAFMKLAALTGTYYVDHLTPLDWAHAGLRDLAVAVEPVI FSDMEVKIIT 131
Db 61 RKAAGHYVQMAFMKLAALTGTYYVDHLTPLDWAHAGLRDLAVAVEPVI FSDMEVKIIT 120
Qy 132 WGADTTACGDIISGLPVSARRGREIILGPADNPEGGQWRLAPITAYSQOQTRGLLGCIIIT 191
Db 121 WGADTTACGDIISGLPVSARRGREIILGPADNPEGGQWRLAPITAYSQOQTRGLLGCIIIT 180
Qy 192 SLTGRDNQVEGEVQVVSSTATQSFLLATCVNGVCWTVFHGAGSKTLGPKPIQMTYTNVD 251
Db 181 SLTGRDNQVEGEVQVVSSTATQSFLLATCVNGVCWTVFHGAGSKTLGPKPIQMTYTNVD 240
Qy 252 QDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLSPPRVSYLKGSS 311
Db 241 QDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLSPPRVSYLKGSS 300
Qy 312 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 301 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 341

RESULT 6
US-09-539-601-6
; Sequence 6, Application US/09539601C
; Patent No. 6630343
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; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
; US-09-539-601-6

Query Match 95.9%; Score 1766; DB 4; Length 2201;
Best Local Similarity 94.3%; Pred. No. 1.6e-170; Indels 0; Gaps 0;
Matches 332; Conservative 11; Mismatches 9;

Qy 1 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLQAGITKVPYFVR 60
Db 46 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLQAGITKVPYFVR 105
Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLDWAHAGLRDLAVAVEPV 120
Db 106 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLDWAHAGLRDLAVAVEPV 165
Qy 121 IFSDMEVKIITWGADTTACGDIISGLPVSARRGREIILGPADNPEGGQWRLAPITAYSQ 180
Db 166 VFSDMETKVIITWGADTTACGDIISGLPVSARRGREIILGPADNPEGGQWRLAPITAYSQ 225
Qy 181 QTRGLLGCIIITSLTGRDNQVEGEVQVVSSTATQSFLLATCVNGVCWTVFHGAGSKTLGPK 240
Db 226 QTRGLLGCIIITSLTGRDNQVEGEVQVVSSTATQSFLLATCVNGVCWTVFHGAGSKTLGPK 285
Qy 241 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 300
Db 286 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 345
Qy 301 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 346 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 7
US-09-539-601-15
; Sequence 15, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
; US-09-539-601-15

Query Match 95.9%; Score 1766; DB 4; Length 2201;
Best Local Similarity 94.3%; Pred. No. 1.6e-170; Indels 0; Gaps 0;
Matches 332; Conservative 11; Mismatches 9;

Qy 1 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLQAGITKVPYFVR 60
Db 46 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLQAGITKVPYFVR 105
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Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAGRLDLAVAVEPV 120
Db 106 AHGIRACMLVRKVAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAGRLDLAVAVEPV 165
Qy 121 IFSDMEVKIITWGDATTAACGDIISGLPVSARRGREIILGPDNPEGQGWRLAPITAYSQ 180
Db 166 VFSDMETKVITWGDATTAACGDIILGLPVSARRGREIILGPDNPEGQGWRLAPITAYSQ 225
Qy 181 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCVNGVCWTYFHGAGSKTLAGPK 240
Db 226 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCVNGVCWTYFHGAGSKTLAGPK 285
Qy 241 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRRGRSGSLLS 300
Db 286 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRRGRSGSLLS 345
Qy 301 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 346 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 8
US-10-029-907-3
; Sequence 3, Application US/10029907
; Patent No. 6706874
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/029,907
; CURRENT FILING DATE: 2001-12-21
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-029-907-3
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Query Match 95.9%; Score 1766; DB 4; Length 2201;
Best Local Similarity 94.3%; Pred. No. 1.6e-170;
Matches 332; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 AHLQWIPPLNVRGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVQAGITKVPYFVR 60
Db 46 AHLQWIPPLNVRGRDAVILLTCAIHPELIFTITKLLAILGLPMLVQAGITKVPYFVR 105
Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAGRLDLAVAVEPV 120
Db 106 AHGIRACMLVRKVAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAGRLDLAVAVEPV 165
Qy 121 IFSDMEVKIITWGDATTAACGDIISGLPVSARRGREIILGPDNPEGQGWRLAPITAYSQ 180
Db 166 VFSDMETKVITWGDATTAACGDIILGLPVSARRGREIILGPDNPEGQGWRLAPITAYSQ 225
Qy 181 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCVNGVCWTYFHGAGSKTLAGPK 240
Db 226 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCVNGVCWTYFHGAGSKTLAGPK 285
Qy 241 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRRGRSGSLLS 300
Db 286 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRRGRSGSLLS 345
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Qy 301 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 346 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 9
US-09-539-601-3
; Sequence 3, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartschlagher, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-3

Query Match 95.9%; Score 1766; DB 4; Length 3010;
Best Local Similarity 94.3%; Pred. No. 2.5e-170;
Matches 332; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 AHLQWIPPLNVRGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVQAGITKVPYFVR 60
Db 855 AHLQWIPPLNVRGRDAVILLTCAIHPELIFTITKLLAILGLPMLVQAGITKVPYFVR 914
Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAGRLDLAVAVEPV 120
Db 915 AHGLIRACMLVRKVAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAGRLDLAVAVEPV 974
Qy 121 IFSDMEVKIITWGDATTAACGDIISGLPVSARRGREIILGPDNPEGQGWRLAPITAYSQ 180
Db 975 VFSDMETKVITWGDATTAACGDIILGLPVSARRGREIILGPDNPEGQGWRLAPITAYSQ 1034
Qy 181 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCVNGVCWTYFHGAGSKTLAGPK 240
Db 1035 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCVNGVCWTYFHGAGSKTLAGPK 1094
Qy 241 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRRGRSGSLLS 300
Db 1095 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRRGRSGSLLS 1154
Qy 301 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 1155 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 1206

RESULT 10
US-09-539-601-21
; Sequence 21, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartschlagher, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 21
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-21
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Query Match      95.9%; Score 1766; DB 4; Length 3010;
Best Local Similarity 94.3%; Pred. No. 2.5e-170;
Matches 332; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

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Db 915 AHGLIRACMLVRKAGHYVQMALMKLAALTGTYYVDHLTPLRDWAHAGRLDLAVAVEPV 974
Qy 121 IFSMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQWRLLAPITAYSQ 180
Db 975 VFSDMETKVIITWGADTAACGDIILGLPVSARRGREIHLGPADSLGEGQWRLLAPITAYSQ 1034
Qy 181 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 240
Db 1035 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 1094
Qy 241 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIIPVRRGDSRGSLLS 300
Db 1095 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIIPVRRGDSRGSLLS 1154
Qy 301 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 1155 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 1206

RESULT 11
US-09-539-601-27
; Sequence 27, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 27
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-27

Query Match      95.9%; Score 1766; DB 4; Length 3010;
Best Local Similarity 94.3%; Pred. No. 2.5e-170;
Matches 332; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 AHLQWIPPLNVRGGRDAIILLTCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVR 60
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Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPV 120
Db 915 AHGLIRACMLVRKAGHYVQMALMKLAALTGTYYVDHLTPLRDWAHAGRLDLAVAVEPV 974
Qy 121 IFSMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQWRLLAPITAYSQ 180
Db 975 VFSDMETKVIITWGADTAACGDIILGLPVSARRGREIHLGPADSLGEGQWRLLAPITAYSQ 1034
Qy 181 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 240
Db 1035 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 1094
Qy 241 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIIPVRRGDSRGSLLS 300
Db 1095 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIIPVRRGDSRGSLLS 1154
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RESULT 12
US-09-539-601-33
; Sequence 33, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 33
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-33

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Matches 331; Conservative 11; Mismatches 10; Indels 0; Gaps 0;

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Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPV 120
Db 915 AHGLIRACMLVRKAGHYVQMALMKLAALTGTYYVDHLTPLRDWAHAGRLDLAVAVEPV 974
Qy 121 IFSMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQWRLLAPITAYSQ 180
Db 975 VFSDMETKVIITWGADTAACGDIILGLPVSARRGREIHLGPADSLGEGQWRLLAPITAYSQ 1034
Qy 181 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 240
Db 1035 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 1094
Qy 241 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIIPVRRGDSRGSLLS 300
Db 1095 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIIPVRRGDSRGSLLS 1154
Qy 301 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 1155 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 1206

RESULT 13
US-09-263-933-4
; Sequence 4, Application US/09263933
; Patent No. 6280940
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/263,933
; CURRENT FILING DATE: 1999-03-08
; EARLIER APPLICATION NUMBER: 09/129,611
; EARLIER FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 4
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; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; US-09-263-933-4

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Matches 330; Conservative 12;

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Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGOGWRLLPITAYSQ 180
Db 254 VFSDMETKIITWGADTAACGDIILGLPVSARRGKEILLGPADSLGEGRWLLAPITAYSQ 313

Qy 181 QTRGLLGCIIITSLTGRDKNQVEGEVQVSTATQSFLATCVNGVCWTTFVHGAGSKTLGAPK 240
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Qy 241 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db 374 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 433

Qy 301 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 434 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 14
US-09-919-901-4
; Sequence 4, Application US/09919901
; Patent No. 6599738
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; PRIOR FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
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; ORGANISM: Artificial Sequence
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; OTHER INFORMATION:
; US-09-919-901-4

Query Match      95.4%; Score 1757; DB 4; Length 1692;
Best Local Similarity 93.8%; Pred. No. 8.9e-170; Mismatches 10; Indels 0; Gaps 0;
Matches 330; Conservative 12;

Qy 1 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLLAIFGMLVQAGITKVPYFVR 60
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Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLODWAHAGRLDLAVAVEPV 120
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Qy 241 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db 374 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 433

Qy 301 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 434 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 15
US-10-191-966-4
; Sequence 4, Application US/10191966
; Patent No. 6790612
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191,966
; PRIOR FILING DATE: 2002-07-10
; PRIOR APPLICATION NUMBER: US/09/263,933
; PRIOR FILING DATE: 1999-03-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
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; FEATURE:
; OTHER INFORMATION:
; US-10-191-966-4

Query Match      95.4%; Score 1757; DB 4; Length 1692;
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Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLODWAHAGRLDLAVAVEPV 120
Db 194 AQLIHACMLVRKVAGHYVQMAFMKLGALTGTYYVYVYDHLTPLRDWAHAGRLDLAVAVEPV 253

Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGOGWRLLPITAYSQ 180
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Qy 181 QTRGLLGCIIITSLTGRDKNQVEGEVQVSTATQSFLATCVNGVCWTTFVHGAGSKTLGAPK 240
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Qy 241 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db 374 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 433

Qy 301 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 434 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 485
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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

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Title: US-10-650-585-13

Perfect score: 1842

Sequence: 1 AHQVWIPPLNVRGRDAII.....RGVAKAVDFIPVSMETTM 352

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- 3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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4	1842	100.0	380	15	US-10-650-585-12
5	1842	100.0	393	13	US-10-017-736-11
6	1842	100.0	393	15	US-10-650-585-11
7	1842	100.0	409	13	US-10-017-736-2
8	1842	100.0	409	15	US-10-650-585-2
9	1778	96.5	341	13	US-10-017-736-14
10	1778	96.5	341	15	US-10-650-585-14
11	1766	95.9	2201	13	US-10-029-907-3
12	1766	95.9	2201	14	US-10-309-561-3
13	1766	95.9	2201	16	US-10-789-355-3

14	1766	95.9	3010	15	US-10-467-000-1	Sequence 1, Appli
15	1757	95.4	1692	10	US-09-919-901-4	Sequence 4, Appli
16	1757	95.4	1692	14	US-10-191-966-4	Sequence 4, Appli
17	1757	95.4	2307	10	US-09-919-901-2	Sequence 2, Appli
18	1757	95.4	2307	14	US-10-191-966-2	Sequence 2, Appli
19	1754	95.2	1692	10	US-09-919-901-11	Sequence 11, Appli
20	1754	95.2	1692	14	US-10-191-966-11	Sequence 11, Appli
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23	1745	94.7	1692	10	US-09-919-901-18	Sequence 18, Appli
24	1745	94.7	1692	14	US-10-191-966-18	Sequence 18, Appli
25	1745	94.7	2307	10	US-09-919-901-16	Sequence 16, Appli
26	1745	94.7	2307	14	US-10-191-966-16	Sequence 16, Appli
27	1744	94.7	3010	16	US-10-333-449A-34	Sequence 34, Appli
28	1699	92.2	2201	13	US-10-085-476-2	Sequence 2, Appli
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32	1619	87.9	3011	15	US-10-328-997-3	Sequence 3, Appli
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36	1616	87.7	3011	9	US-09-916-359-2	Sequence 2, Appli
37	1616	87.7	3011	15	US-10-296-734-406	Sequence 406, App
38	1616	87.7	3011	16	US-10-445-724-2	Sequence 2, Appli
39	1615	87.7	3011	9	US-09-238-076-20	Sequence 20, Appli
40	1615	87.7	3011	10	US-09-995-937-20	Sequence 20, Appli
41	1615	87.7	3011	10	US-09-917-563-20	Sequence 20, Appli
42	1612	87.5	3011	9	US-09-952-572-9	Sequence 9, Appli
43	1612	87.5	3011	9	US-09-747-419-20	Sequence 20, Appli
44	1612	87.5	3011	14	US-10-259-275-20	Sequence 20, Appli
45	1612	87.5	3011	15	US-10-189-359-14	Sequence 14, Appli

ALIGNMENTS

RESULT 1

US-10-017-736-13
 ; Sequence 13, Application US/10017736
 ; Publication No. US20020192640A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
 ; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
 ; FILE REFERENCE: 13/082
 ; CURRENT APPLICATION NUMBER: US/10/017,736
 ; CURRENT FILING DATE: 2001-12-14
 ; PRIOR APPLICATION NUMBER: 60/256,031
 ; PRIOR FILING DATE: 2000-12-15
 ; NUMBER OF SEQ ID NOS: 21
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 13
 ; LENGTH: 352
 ; TYPE: PRT
 ; ORGANISM: HCV
 ; US-10-017-736-13

Query Match		100.0%	Score 1842;	DB 13;	Length 352;
Best Local Similarity		100.0%;	Pred. No. 1.6e-174;		
Matches 352;		Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
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Qy	121	IFSDMEVKIITWGDATTAACGDI	121	ISGLPVSARRGRIILLG	PADNPEGGOWRLLAPITAYSQ 180
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RESULT 2
US-10-650-585-13
; Sequence 13, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT FILING DATE: 2003-08-28
; CURRENT APPLICATION NUMBER: US/10/650,585
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; SOFTWARE: FastSeq for Windows Version 4.0
; NUMBER OF SEQ ID NOS: 21
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; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
; US-10-650-585-13

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Best Local Similarity 100.0%; Pred. No. 1.6e-174;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AHQVWIPPLNVGRDRAIILLTCAVHPELIFDITKLLLAIFGLPLMWLQAGITKVPYFVR 60
Db 1 AHQVWIPPLNVGRDRAIILLTCAVHPELIFDITKLLLAIFGLPLMWLQAGITKVPYFVR 60
Qy 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 120
Db 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 120
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGQWRLAPITAYSQ 180
Db 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGQWRLAPITAYSQ 180
Qy 181 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFLLATCVNGVCTVFGHAGSKTLGAPK 240
Db 181 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFLLATCVNGVCTVFGHAGSKTLGAPK 240
Qy 241 GPITQMTYNDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db 241 GPITQMTYNDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Qy 301 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMETTMR 352
Db 301 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMETTMR 352

RESULT 3
US-10-017-736-12
; Sequence 12, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
```

```
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736-12

Query Match 100.0%; Score 1842; DB 13; Length 380;
Best Local Similarity 100.0%; Pred. No. 1.8e-174;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AHQVWIPPLNVGRDRAIILLTCAVHPELIFDITKLLLAIFGLPLMWLQAGITKVPYFVR 60
Db 29 AHQVWIPPLNVGRDRAIILLTCAVHPELIFDITKLLLAIFGLPLMWLQAGITKVPYFVR 88
Qy 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 120
Db 89 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 148
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGQWRLAPITAYSQ 180
Db 149 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGQWRLAPITAYSQ 208
Qy 181 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFLLATCVNGVCTVFGHAGSKTLGAPK 240
Db 209 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFLLATCVNGVCTVFGHAGSKTLGAPK 268
Qy 241 GPITQMTYNDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db 269 GPITQMTYNDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 328
Qy 301 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMETTMR 352
Db 329 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMETTMR 380

RESULT 4
US-10-650-585-12
; Sequence 12, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
; US-10-650-585-12

Query Match 100.0%; Score 1842; DB 15; Length 380;
Best Local Similarity 100.0%; Pred. No. 1.8e-174;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AHQVWIPPLNVGRDRAIILLTCAVHPELIFDITKLLLAIFGLPLMWLQAGITKVPYFVR 60
Db 29 AHQVWIPPLNVGRDRAIILLTCAVHPELIFDITKLLLAIFGLPLMWLQAGITKVPYFVR 88
Qy 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 120
Db 89 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 148
```

Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNPEGQGWRLAPITAYSQ 180
|
Db 149 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNPEGQGWRLAPITAYSQ 208
|
Qy 181 QTRGLLGCIIITSLGRDNQVEGEVQVVSATQSFATCVNGVCWTFVHGAGSKTLGPK 240
|
Db 209 QTRGLLGCIIITSLGRDNQVEGEVQVVSATQSFATCVNGVCWTFVHGAGSKTLGPK 268
|
Qy 241 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLS 300
|
Db 269 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLS 328
|
Qy 301 PRPVSYLKGSGGPGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
|
Db 329 PRPVSYLKGSGGPGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 380
|
RESULT 5
US-10-017-736-11
; Sequence 11, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017.736
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-11
Query Match 100.0%; Score 1842; DB 13; Length 393;
Best Local Similarity 100.0%; Pred. No. 1.9e-174;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLLAIFGLPMLVLAQGITKVPYFVR 60
|
Db 42 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLLAIFGLPMLVLAQGITKVPYFVR 101
|
Qy 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAPV 120
|
Db 102 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAPV 161
|
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNPEGQGWRLAPITAYSQ 180
|
Db 162 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNPEGQGWRLAPITAYSQ 221
|
Qy 181 QTRGLLGCIIITSLGRDNQVEGEVQVVSATQSFATCVNGVCWTFVHGAGSKTLGPK 240
|
Db 222 QTRGLLGCIIITSLGRDNQVEGEVQVVSATQSFATCVNGVCWTFVHGAGSKTLGPK 281
|
Qy 241 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLS 300
|
Db 282 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLS 341
|
Qy 301 PRPVSYLKGSGGPGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
|
Db 342 PRPVSYLKGSGGPGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
|
RESULT 6
US-10-650-585-11
; Sequence 11, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650.585
; CURRENT FILING DATE: 2003-08-28
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-11
Query Match 100.0%; Score 1842; DB 15; Length 393;
Best Local Similarity 100.0%; Pred. No. 1.9e-174;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLLAIFGLPMLVLAQGITKVPYFVR 60
|
Db 42 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLLAIFGLPMLVLAQGITKVPYFVR 101
|
Qy 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAPV 120
|
Db 102 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAPV 161
|
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNPEGQGWRLAPITAYSQ 180
|
Db 162 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNPEGQGWRLAPITAYSQ 221
|
Qy 181 QTRGLLGCIIITSLGRDNQVEGEVQVVSATQSFATCVNGVCWTFVHGAGSKTLGPK 240
|
Db 222 QTRGLLGCIIITSLGRDNQVEGEVQVVSATQSFATCVNGVCWTFVHGAGSKTLGPK 281
|
Qy 241 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLS 300
|
Db 282 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLS 341
|
Qy 301 PRPVSYLKGSGGPGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
|
Db 342 PRPVSYLKGSGGPGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
|
RESULT 7
US-10-017-736-2
; Sequence 2, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017.736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-2
Query Match 100.0%; Score 1842; DB 13; Length 409;
Best Local Similarity 100.0%; Pred. No. 2e-174;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLLAIFGLPMLVLAQGITKVPYFVR 60
|
Db 46 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLLAIFGLPMLVLAQGITKVPYFVR 105
|

Qy 61 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTVYDHLTPLODWAHAGLRDLAVAVEPV 120
Db |||||
Qy 106 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTVYDHLTPLODWAHAGLRDLAVAVEPV 165
Db |||||
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQ 180
Db |||||
Qy 166 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQ 225
Db |||||
Qy 181 QTRGLGCIITSLTRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLGAPK 240
Db |||||
Qy 226 QTRGLGCIITSLTRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLGAPK 285
Db |||||
Qy 241 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db |||||
Qy 286 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 345
Db |||||
Qy 301 PRPVSYLKSGSGGLLCPSGHAGVIFRAAACTRGVAKAVDFIPVESMETTMR 352
Db |||||
Qy 346 PRPVSYLKSGSGGLLCPSGHAGVIFRAAACTRGVAKAVDFIPVESMETTMR 397
Db |||||

RESULT 8

US-10-650-585-2
; Sequence 2, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; PRIOR FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-2

Query Match 100.0%; Score 1842; DB 15; Length 409;
Best Local Similarity 100.0%; Pred. No. 2e-174;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AHLQVWIPPLNVRGGRDAIILLTCAVHPELIFDITKLLLAIFGPLMVLQAGITKVPYFVR 60
Db |||||
Qy 46 AHLQVWIPPLNVRGGRDAIILLTCAVHPELIFDITKLLLAIFGPLMVLQAGITKVPYFVR 105
Db |||||
Qy 61 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTVYDHLTPLODWAHAGLRDLAVAVEPV 120
Db |||||
Qy 106 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTVYDHLTPLODWAHAGLRDLAVAVEPV 165
Db |||||
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQ 180
Db |||||
Qy 166 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQ 225
Db |||||
Qy 181 QTRGLGCIITSLTRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLGAPK 240
Db |||||
Qy 226 QTRGLGCIITSLTRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLGAPK 285
Db |||||
Qy 241 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db |||||
Qy 286 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 345
Db |||||
Qy 301 PRPVSYLKSGSGGLLCPSGHAGVIFRAAACTRGVAKAVDFIPVESMETTMR 352
Db |||||
Qy 346 PRPVSYLKSGSGGLLCPSGHAGVIFRAAACTRGVAKAVDFIPVESMETTMR 397
Db |||||

RESULT 9

Query Match 96.5%; Score 1778; DB 15; Length 341;
Best Local Similarity 100.0%; Pred. No. 3.6e-168;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

US-10-017-736-14
; Sequence 14, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-14

Query Match 96.5%; Score 1778; DB 13; Length 341;
Best Local Similarity 100.0%; Pred. No. 3.6e-168;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 12 VRGGRDAIILLTCAVHPELIFDITKLLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 71
Db |||||
Qy 1 VRGGRDAIILLTCAVHPELIFDITKLLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 60
Db |||||
Qy 72 RKAAGGHYVQMAFMKLAALTGTVYDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIIT 131
Db |||||
Qy 61 RKAAGGHYVQMAFMKLAALTGTVYDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIIT 120
Db |||||
Qy 132 WGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQOTRGLGCIIT 191
Db |||||
Qy 121 WGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQOTRGLGCIIT 180
Db |||||
Qy 192 SLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLGAPKGPITQMTYTNVD 251
Db |||||
Qy 181 SLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLGAPKGPITQMTYTNVD 240
Db |||||
Qy 252 QDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 311
Db |||||
Qy 241 QDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 300
Db |||||
Qy 312 GGPLLCPSGHAGVIFRAAACTRGVAKAVDFIPVESMETTMR 352
Db |||||
Qy 301 GGPLLCPSGHAGVIFRAAACTRGVAKAVDFIPVESMETTMR 341
Db |||||

RESULT 10

US-10-650-585-14
; Sequence 14, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-14

Query Match 96.5%; Score 1778; DB 15; Length 341;
Best Local Similarity 100.0%; Pred. No. 3.6e-168;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;


```
Qy 12 VRGGRDAIILLTCAVHPELIDITKLLLAIFGPMVLQAGITKVPYFVRQAQGLIRACMLV 71
Db 1 VRGGRDAIILLTCAVHPELIDITKLLLAIFGPMVLQAGITKVPYFVRQAQGLIRACMLV 60
Qy 72 RKAAGGHVQMAFMKLAALGTYYVDHLTPLQDWAHAGLRDLAVAVPEVIFSDMEVKIIT 131
Db 61 RKAAGGHVQMAFMKLAALGTYYVDHLTPLQDWAHAGLRDLAVAVPEVIFSDMEVKIIT 120
Qy 132 WGADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLLIAPITAYSQOTRGLLGCIIT 191
Db 121 WGADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLLIAPITAYSQOTRGLLGCIIT 180
Qy 192 SLTGRDNQVEGEVQVYSTATQSFATCVNGVCWTVFHHGAGSKTLAGPKGPITQMYTNVD 251
Db 181 SLTGRDNQVEGEVQVYSTATQSFATCVNGVCWTVFHHGAGSKTLAGPKGPITQMYTNVD 240
Qy 252 QDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 311
Db 241 QDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 300
Qy 312 GGPLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 352
Db 301 GGPLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 341
```

RESULT 11

```
US-10-029-907-3
; Sequence 3, Application US/10029907
; Publication No. US20020142350A1
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/029,907
; PRIOR FILING DATE: 2001-12-21
; PRIOR FILING DATE: 2001-12-21
; PRIOR FILING DATE: 2001-12-21
; PRIOR FILING DATE: 2001-12-21
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-029-907-3
```

```
Query Match 95.9%; Score 1766; DB 13; Length 2201;
Best Local Similarity 94.3%; Pred. No. 7.2e-166;
Matches 332; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 AHLOQWIPPLNVRGGRDAIILLTCAVHPELIDITKLLLAIFGPMVLQAGITKVPYFVR 60
Db 46 AHLOQWIPPLNVRGGRDAIILLTCAVHPELIDITKLLLAIFGPMVLQAGITKVPYFVR 105
Qy 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALGTYYVDHLTPLQDWAHAGLRDLAVAVEPV 120
Db 106 AHGLIRACMLVRKAGHYVQMAFMKLAALGTYYVDHLTPLQDWAHAGLRDLAVAVEPV 165
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLLIAPITAYSQ 180
Db 166 VFSDMETKVIITWGADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLLIAPITAYSQ 225
Qy 181 QTRGLLGCIITSLTGRDNQVEGEVQVYSTATQSFATCVNGVCWTVFHHGAGSKTLAGPK 240
Db 226 QTRGLLGCIITSLTGRDNQVEGEVQVYSTATQSFATCVNGVCWTVFHHGAGSKTLAGPK 285
Qy 241 GPITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db 286 GPITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 345
Qy 301 PRPVSYLKSSGGPGLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 352
Db 346 PRPVSYLKSSGGPGLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 397
```

RESULT 13

```
US-10-789-355-3
; Sequence 3, Application US/10789355
```

```
Qy 241 GPITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db 286 GPITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 345
Qy 301 PRPVSYLKSSGGPGLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 352
Db 346 PRPVSYLKSSGGPGLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 397
```

RESULT 12

```
US-10-309-561-3
; Sequence 3, Application US/10309561
; Publication No. US20030148348A1
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/309,561
; PRIOR FILING DATE: 2002-12-04
; PRIOR FILING DATE: 2002-12-04
; PRIOR FILING DATE: 2001-12-21
; PRIOR FILING DATE: 2001-12-21
; PRIOR FILING DATE: 2001-12-21
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-309-561-3
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Query Match 95.9%; Score 1766; DB 14; Length 2201;
Best Local Similarity 94.3%; Pred. No. 7.2e-166;
Matches 332; Conservative 11; Mismatches 9; Indels 0; Gaps 0;
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Qy 1 AHLOQWIPPLNVRGGRDAIILLTCAVHPELIDITKLLLAIFGPMVLQAGITKVPYFVR 60
Db 46 AHLOQWIPPLNVRGGRDAIILLTCAVHPELIDITKLLLAIFGPMVLQAGITKVPYFVR 105
Qy 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALGTYYVDHLTPLQDWAHAGLRDLAVAVEPV 120
Db 106 AHGLIRACMLVRKAGHYVQMAFMKLAALGTYYVDHLTPLQDWAHAGLRDLAVAVEPV 165
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLLIAPITAYSQ 180
Db 166 VFSDMETKVIITWGADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLLIAPITAYSQ 225
Qy 181 QTRGLLGCIITSLTGRDNQVEGEVQVYSTATQSFATCVNGVCWTVFHHGAGSKTLAGPK 240
Db 226 QTRGLLGCIITSLTGRDNQVEGEVQVYSTATQSFATCVNGVCWTVFHHGAGSKTLAGPK 285
Qy 241 GPITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db 286 GPITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 345
Qy 301 PRPVSYLKSSGGPGLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 352
Db 346 PRPVSYLKSSGGPGLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 397
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; Publication No. US2004018033A1
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; TITLE OF INVENTION: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/789,355
; PRIOR FILING DATE: 2004-02-27
; PRIOR APPLICATION NUMBER: US/10/029,907
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
; US-10-789-355-3

Query Match          95.9%; Score 1766; DB 16; Length 2201;
Best Local Similarity 94.3%; Pred. No. 7.2e-166;
Matches 332; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 AHQVWIPPLNVRGGRDAIILLTCAVHPDLIFDITKLLLAIFGLPLMWLQAGITKVPYFVR 60
Db 46 AHQVWIPPLNVRGGRDAVILLTCAIHPDLIFTITKLLLAIFGLPLMWLQAGITKVPYFVR 105
Qy 61 AQLIRACMLVRKAGGHYVQMAFMKLAALTGTYYDHLTPLQDWAHAGRLDLAVAVEPV 120
Db 106 AHGLIRACMLVRKAGGHYVQMALMKLAALTGTYYDHLTPLRDWAHAGRLDLAVAVEPV 165
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQWRLAPITAYSQ 180
Db 166 VFSDMETKVTITWGADTAACGDIILGLPVSARRGREIHLGPADSLLEGQWRLAPITAYSQ 225
Qy 181 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 240
Db 226 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 285
Qy 241 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 300
Db 286 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 345
Qy 301 PRPVSYLKGSGGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 352
Db 346 PRPVSYLKGSGGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 397

RESULT 14
US-10-467-000-1
; Sequence 1, Application US/10467000
; Publication No. US20040067486A1
; GENERAL INFORMATION:
; APPLICANT: De Francesco, Raffaele
; APPLICANT: Migliaccio, Giovanni
; APPLICANT: Paonessa, Giacomo
; TITLE OF INVENTION: HEPATITIS C VIRUS REPLICONS AND REPLICON
; TITLE OF INVENTION: ENHANCED CELLS
; FILE REFERENCE: ITR0003P
; CURRENT APPLICATION NUMBER: US/10/467,000
; CURRENT FILING DATE: 2003-07-21
; PRIOR APPLICATION NUMBER: PCT/EP02/00526
; PRIOR FILING DATE: 2002-01-16
; PRIOR APPLICATION NUMBER: 60/263,479
;

Qy 1 AHQVWIPPLNVRGGRDAIILLTCAVHPDLIFDITKLLLAIFGLPLMWLQAGITKVPYFVR 60
Db 46 AHQVWIPPLNVRGGRDAVILLTCAIHPDLIFTITKLLLAIFGLPLMWLQAGITKVPYFVR 105
Qy 61 AQLIRACMLVRKAGGHYVQMAFMKLAALTGTYYDHLTPLQDWAHAGRLDLAVAVEPV 120
Db 106 AHGLIRACMLVRKAGGHYVQMALMKLAALTGTYYDHLTPLRDWAHAGRLDLAVAVEPV 165
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQWRLAPITAYSQ 180
Db 166 VFSDMETKVTITWGADTAACGDIILGLPVSARRGREIHLGPADSLLEGQWRLAPITAYSQ 225
Qy 181 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 240
Db 226 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 285
Qy 241 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 300
Db 286 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 345
Qy 301 PRPVSYLKGSGGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 352
Db 346 PRPVSYLKGSGGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 397

RESULT 15
US-09-919-901-4
; Sequence 4, Application US/09919901
; Publication No. US20030082518A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; CURRENT FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
; US-09-919-901-4

Query Match          95.4%; Score 1757; DB 10; Length 1692;
Best Local Similarity 93.8%; Pred. No. 4e-165;
Matches 330; Conservative 12; Mismatches 10; Indels 0; Gaps 0;

Qy 1 AHQVWIPPLNVRGGRDAIILLTCAVHPDLIFDITKLLLAIFGLPLMWLQAGITKVPYFVR 60
Db 134 AHLEHWIPPLNARGGRDAIILLMCAVHPDLIFDITKLLLAIFGLPLMWLQAGITKVPYFVR 193
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; PRIOR FILING DATE: 2001-01-23
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Con 1 HCV isolate nucleic acid
; US-10-467-000-1

Query Match          95.9%; Score 1766; DB 15; Length 3010;
Best Local Similarity 94.3%; Pred. No. 1.1e-165;
Matches 332; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 AHQVWIPPLNVRGGRDAIILLTCAVHPDLIFDITKLLLAIFGLPLMWLQAGITKVPYFVR 60
Db 855 AHQVWIPPLNVRGGRDAVILLTCAIHPDLIFTITKLLLAIFGLPLMWLQAGITKVPYFVR 914
Qy 61 AQLIRACMLVRKAGGHYVQMAFMKLAALTGTYYDHLTPLQDWAHAGRLDLAVAVEPV 120
Db 915 AHGLIRACMLVRKAGGHYVQMALMKLAALTGTYYDHLTPLRDWAHAGRLDLAVAVEPV 974
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQWRLAPITAYSQ 180
Db 975 VFSDMETKVTITWGADTAACGDIILGLPVSARRGREIHLGPADSLLEGQWRLAPITAYSQ 1034
Qy 181 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 240
Db 1035 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 1094
Qy 241 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 300
Db 1095 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 1154
Qy 301 PRPVSYLKGSGGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 352
Db 1155 PRPVSYLKGSGGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 1206
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Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTTVYDHLTPLODWAHAGLRDLAVAVEPV 120
Db 194 AQLIHACMLVRKVAGHYVQMAFMKLGALTGTYIYNHLTPLRDWAHAGLRDLAVAVEPV 253
Qy 121 IFSDMEVKIITWGDADTAACGDIISGLPVSARRGREILLGPADNPEGOGWRLLAPITAYSQ 180
Db 254 VFSDETKIITWGDADTAACGDIILGLPVSARRGREILLGPADNPEGOGWRLLAPITAYSQ 313
Qy 181 QTRGLLGCIIITSLTGRDKNOVEGEVQVWVSTATQSFATCVNGVCWTVFHGAGSKTLAGPK 240
Db 314 QTRGLLGCIIITSLTGRDKNOVEGEVQVWVSTATQSFATCVNGVCWTVFHGAGSKTLAGPK 373
Qy 241 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIIPVRRGDSRGSLLS 300
Db 374 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIIPVRRGDSRGSLLS 433
Qy 301 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 434 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 485

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Search completed: May 26, 2005, 22:43:01
Job time : 63.4305 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: May 26, 2005, 21:44:29 ; Search time 19.7908 Seconds
(without alignments)

1286.219 Million cell updates/sec

Title: US-10-650-585-14

Perfect score: 1778

Sequence: 1 VRGRDAIILLTCVAHPHLL.....RGVAKAVDFIPVSMETWTR 341

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*

1: /cgn2_6/ptodata/1/iaa/5A COMB.pep.*
2: /cgn2_6/ptodata/1/iaa/5B COMB.pep.*
3: /cgn2_6/ptodata/1/iaa/6A COMB.pep.*
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5: /cgn2_6/ptodata/1/iaa/PCTUS COMB.pep.*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1778	100.0	341	4	US-10-017-736C-14
2	1778	100.0	352	4	US-10-017-736C-13
3	1778	100.0	380	4	US-10-017-736C-12
4	1778	100.0	393	4	US-10-017-736C-11
5	1778	100.0	409	4	US-10-017-736C-2
6	1702	95.7	2201	4	US-09-539-601-6
7	1702	95.7	2201	4	US-09-539-601-15
8	1702	95.7	2201	4	US-10-029-907-3
9	1702	95.7	3010	4	US-09-539-601-3
10	1702	95.7	3010	4	US-09-539-601-21
11	1702	95.7	3010	4	US-09-539-601-27
12	1698	95.5	1692	3	US-09-263-933-4
13	1698	95.5	1692	4	US-09-919-901-4
14	1698	95.5	1692	4	US-10-191-966-4
15	1698	95.5	2307	3	US-09-263-933-2
16	1698	95.5	2307	4	US-09-919-901-2
17	1698	95.5	2307	4	US-10-191-966-2
18	1695	95.3	1692	3	US-09-263-933-11
19	1695	95.3	1692	4	US-09-919-901-11
20	1695	95.3	1692	4	US-10-191-966-11
21	1695	95.3	2307	3	US-09-263-933-9
22	1695	95.3	2307	4	US-09-919-901-9
23	1695	95.3	2307	4	US-10-191-966-9
24	1695	95.3	3010	4	US-09-539-601-33
25	1687	94.9	3010	3	US-09-014-416-3
26	1686	94.8	1692	3	US-09-263-933-18
27	1686	94.8	1692	4	US-09-919-901-18

28	1686	94.8	1692	4	US-10-191-966-18	Sequence 18, Appl
29	1686	94.8	2307	3	US-09-263-933-16	Sequence 16, Appl
30	1686	94.8	2307	4	US-09-919-901-16	Sequence 16, Appl
31	1686	94.8	2307	4	US-10-191-966-16	Sequence 16, Appl
32	1649	92.7	2013	1	US-08-324-977-12	Sequence 12, Appl
33	1649	92.7	2013	2	US-08-384-616-12	Sequence 12, Appl
34	1649	92.7	2013	2	US-08-904-686A-12	Sequence 12, Appl
35	1649	92.7	2013	3	US-09-315-850-12	Sequence 12, Appl
36	1649	92.7	2201	3	US-08-952-981A-2	Sequence 2, Appl
37	1649	92.7	2620	1	US-08-324-977-32	Sequence 32, Appl
38	1649	92.7	2620	2	US-08-384-616-32	Sequence 32, Appl
39	1649	92.7	2620	2	US-08-904-686A-32	Sequence 32, Appl
40	1649	92.7	2620	3	US-09-315-850-32	Sequence 32, Appl
41	1649	92.7	2621	1	US-08-324-977-36	Sequence 36, Appl
42	1649	92.7	2621	2	US-08-384-616-36	Sequence 36, Appl
43	1649	92.7	2621	2	US-08-904-686A-36	Sequence 36, Appl
44	1649	92.7	2621	3	US-09-315-850-36	Sequence 36, Appl
45	1649	92.7	3010	1	US-08-324-977-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1

US-10-017-736C-14
; Sequence 14, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibault, Diane
; APPLICANT: Lamarrre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736C-14

Query Match	100.0%;	Score	1778;	DB	4;	Length	341;
Best Local Similarity	100.0%;	Pred. No.	5.9e-173;				
Matches	341;	Conservative	0;	Mismatches	0;	Indels	0;
Gaps	0;						
Qy	1	VRGRDAIILLTCVAHPHLLFDITKLLLAIFGPIMLVLAQGITKVPYFVRAQGLIRACMLV	60				
Db	1	VRGRDAIILLTCVAHPHLLFDITKLLLAIFGPIMLVLAQGITKVPYFVRAQGLIRACMLV	60				
Qy	61	RKAAGHYVQMAFMKLAALGTGTYVDHLTLPQDWAHAGLRDLAVAVEPFIQSDMEVKIIT	120				
Db	61	RKAAGHYVQMAFMKLAALGTGTYVDHLTLPQDWAHAGLRDLAVAVEPFIQSDMEVKIIT	120				
Qy	121	WGADTAACGDIISGLPVSAARRREIILGPADNFEQGWRLAPITAYSQOTRGLLGCIIIT	180				
Db	121	WGADTAACGDIISGLPVSAARRREIILGPADNFEQGWRLAPITAYSQOTRGLLGCIIIT	180				
Qy	181	SLTGRDNQVEGEVQVVTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPIITOMYTNVD	240				
Db	181	SLTGRDNQVEGEVQVVTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPIITOMYTNVD	240				
Qy	241	QDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADYIPVRRRGDSRGSLLSPRPVSLKGS	300				
Db	241	QDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADYIPVRRRGDSRGSLLSPRPVSLKGS	300				
Qy	301	GGPILCPESHAVGIFRAAVCTRGVAKAVDFIPVESMETWTR	341				

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Db      301 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 341
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-12

Query Match      100.0%; Score 1778; DB 4; Length 380;
Best Local Similarity 100.0%; Pred. No. 6.9e-173; Indels 0; Gaps 0;
Matches 341; Conservative 0; Mismatches 0;

Qy      1 VRGRDAIILLTCAVHPDLIFDITKLLAIFGPLMWLQAGITKVPYFVRAQGLIRACMLV 60
Db      40 VRGRDAIILLTCAVHPDLIFDITKLLAIFGPLMWLQAGITKVPYFVRAQGLIRACMLV 99
Qy      61 RKAAGHYVQWAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPVFSDMEVKIIT 120
Db      100 RKAAGHYVQWAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPVFSDMEVKIIT 159
Qy      121 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQOTRGLGCIIT 180
Db      160 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQOTRGLGCIIT 219
Qy      181 SLTGRDKNQVEGEVQVYSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPIITQMYTNVD 240
Db      220 SLTGRDKNQVEGEVQVYSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPIITQMYTNVD 279
Qy      241 QDLVGWQAPPGARSMTPTCTGSSDLYLVTTRHADVIPVRRRGDSRGSLLSPRPVSYLKSS 300
Db      280 QDLVGWQAPPGARSMTPTCTGSSDLYLVTTRHADVIPVRRRGDSRGSLLSPRPVSYLKSS 339
Qy      301 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 341
Db      340 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 380

RESULT 4
US-10-017-736C-11
; Sequence 11, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-11

Query Match      100.0%; Score 1778; DB 4; Length 393;
Best Local Similarity 100.0%; Pred. No. 7.3e-173; Indels 0; Gaps 0;
Matches 341; Conservative 0; Mismatches 0;

Qy      1 VRGRDAIILLTCAVHPDLIFDITKLLAIFGPLMWLQAGITKVPYFVRAQGLIRACMLV 60
Db      53 VRGRDAIILLTCAVHPDLIFDITKLLAIFGPLMWLQAGITKVPYFVRAQGLIRACMLV 112
Qy      61 RKAAGHYVQWAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPVFSDMEVKIIT 120
Db      113 RKAAGHYVQWAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPVFSDMEVKIIT 172
Qy      121 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQOTRGLGCIIT 180

Db      301 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 341
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-13

Query Match      100.0%; Score 1778; DB 4; Length 352;
Best Local Similarity 100.0%; Pred. No. 6.2e-173; Indels 0; Gaps 0;
Matches 341; Conservative 0; Mismatches 0;

Qy      1 VRGRDAIILLTCAVHPDLIFDITKLLAIFGPLMWLQAGITKVPYFVRAQGLIRACMLV 60
Db      12 VRGRDAIILLTCAVHPDLIFDITKLLAIFGPLMWLQAGITKVPYFVRAQGLIRACMLV 71
Qy      61 RKAAGHYVQWAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPVFSDMEVKIIT 120
Db      72 RKAAGHYVQWAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPVFSDMEVKIIT 131
Qy      121 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQOTRGLGCIIT 180
Db      132 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQOTRGLGCIIT 191
Qy      181 SLTGRDKNQVEGEVQVYSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPIITQMYTNVD 240
Db      192 SLTGRDKNQVEGEVQVYSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPIITQMYTNVD 251
Qy      241 QDLVGWQAPPGARSMTPTCTGSSDLYLVTTRHADVIPVRRRGDSRGSLLSPRPVSYLKSS 300
Db      252 QDLVGWQAPPGARSMTPTCTGSSDLYLVTTRHADVIPVRRRGDSRGSLLSPRPVSYLKSS 311
Qy      301 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 341
Db      312 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 352

RESULT 3
US-10-017-736C-12
; Sequence 12, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
```

Db 173 WGADTAACGDIISGLPVSAARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 232.
Qy 181 SLTGRDNQVEGEVQVYSTATQSLATCVNGVCWTVFHGAGSKTLAGPKGPIITOMYTNVD 240
Db 233 SLTGRDNQVEGEVQVYSTATQSLATCVNGVCWTVFHGAGSKTLAGPKGPIITOMYTNVD 292
Qy 241 QDLVGMQAPPQARSMTPTCTCGSSDLXVLRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 300
Db 293 QDLVGMQAPPQARSMTPTCTCGSSDLXVLRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 352
Qy 301 GGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 341
Db 353 GGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 393

RESULT 5
US-10-017-736C-2
; Sequence 2, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-2

Query Match 100.0%; Score 1778; DB 4; Length 409;
Best Local Similarity 100.0%; Pred. No. 7.7e-173;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VRGGRDAIILLTCVAVHPELIDITKLLAIFGPIMLVLAQGITKVPYFVRAQGLIRACMLV 60
Db 57 VRGGRDAIILLTCVAVHPELIDITKLLAIFGPIMLVLAQGITKVPYFVRAQGLIRACMLV 116
Qy 61 RKAAGHYVQMAFMKLAALGTYYVDHLTPLDQWAHAGLRDLAVAVPEVPSDMEVKIIT 120
Db 117 RKAAGHYVQMAFMKLAALGTYYVDHLTPLDQWAHAGLRDLAVAVPEVPSDMEVKIIT 176
Qy 121 WGADTAACGDIISGLPVSAARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 180
Db 177 WGADTAACGDIISGLPVSAARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 236
Qy 181 SLTGRDNQVEGEVQVYSTATQSLATCVNGVCWTVFHGAGSKTLAGPKGPIITOMYTNVD 240
Db 237 SLTGRDNQVEGEVQVYSTATQSLATCVNGVCWTVFHGAGSKTLAGPKGPIITOMYTNVD 296
Qy 241 QDLVGMQAPPQARSMTPTCTCGSSDLXVLRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 300
Db 297 QDLVGMQAPPQARSMTPTCTCGSSDLXVLRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 356
Qy 301 GGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 341
Db 357 GGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 397

RESULT 6
US-09-539-601-6
; Sequence 6, Application US/09539601C
; Patent No. 6630343

; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-6

Query Match 95.7%; Score 1702; DB 4; Length 2201;
Best Local Similarity 94.1%; Pred. No. 5.3e-164;
Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 VRGGRDAIILLTCVAVHPELIDITKLLAIFGPIMLVLAQGITKVPYFVRAQGLIRACMLV 60
Db 57 VRGGRDAIILLTCVAVHPELIDITKLLAIFGPIMLVLAQGITKVPYFVRAQGLIRACMLV 116
Qy 61 RKAAGHYVQMAFMKLAALGTYYVDHLTPLDQWAHAGLRDLAVAVPEVPSDMEVKIIT 120
Db 117 RKAAGHYVQMAFMKLAALGTYYVDHLTPLDQWAHAGLRDLAVAVPEVPSDMEVKIIT 176
Qy 121 WGADTAACGDIISGLPVSAARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 180
Db 177 WGADTAACGDIISGLPVSAARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 236
Qy 181 SLTGRDNQVEGEVQVYSTATQSLATCVNGVCWTVFHGAGSKTLAGPKGPIITOMYTNVD 240
Db 237 SLTGRDNQVEGEVQVYSTATQSLATCVNGVCWTVFHGAGSKTLAGPKGPIITOMYTNVD 296
Qy 241 QDLVGMQAPPQARSMTPTCTCGSSDLXVLRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 300
Db 297 QDLVGMQAPPQARSMTPTCTCGSSDLXVLRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 356
Qy 301 GGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 341
Db 357 GGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 397

RESULT 7
US-09-539-601-15
; Sequence 15, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-15

Query Match 95.7%; Score 1702; DB 4; Length 2201;
Best Local Similarity 94.1%; Pred. No. 5.3e-164;
Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 VRGGRDAIILLTCVAVHPELIDITKLLAIFGPIMLVLAQGITKVPYFVRAQGLIRACMLV 60
Db 57 VRGGRDAIILLTCVAVHPELIDITKLLAIFGPIMLVLAQGITKVPYFVRAQGLIRACMLV 116

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Qy 61 RKAAGHYVQWAFKLAALGTGYVDHLTPLODWAHAGLRDLAVAVEPVPVFSDEMKIIT 120
Db 117 RKVAGHYVQWALMKLAALGTGYVDHLTPLRDWAHAGLRDLAVAVEPVPVFSDEMKIIT 176
Qy 121 WGADTAACGDIISGLPVSAARRGRIILGPADNFGQWRLLAPITAYSQQTRGLLGCIIT 180
Db 177 WGADTAACGDIISGLPVSAARRGRIILGPADNFGQWRLLAPITAYSQQTRGLLGCIIT 236
Qy 181 SLTGRDNQVEGEVQVVSSTATQSFATCVNGVCTVVFHAGSKTLAGPKGPIITQMYTNVD 240
Db 237 SLTGRDNQVEGEVQVVSSTATQSFATCVNGVCTVVFHAGSKTLAGPKGPIITQMYTNVD 296
Qy 241 QDLVGMQAPPAGRSMTPTCTCGSSDLVLTTRHADVPVRRRGRSGSLSPRPVSYLKSS 300
Db 297 QDLVGMQAPPAGRSMTPTCTCGSSDLVLTTRHADVPVRRRGRSGSLSPRPVSYLKSS 356
Qy 301 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVSMETMMR 341
Db 357 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVSMETMMR 397

RESULT 8
US-10-029-907-3
; Sequence 3, Application US/10029907
; Patent No. 6706874
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; FILE REFERENCE: HEPATITIS C VIRUS
; CURRENT APPLICATION NUMBER: US/10/029,907
; PRIOR FILING DATE: 2001-12-21
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRP
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-029-907-3

Query Match 95.7%; Score 1702; DB 4; Length 2201;
Best Local Similarity 94.1%; Pred. No. 5.3e-164; Indels 0; Gaps 0;
Matches 321; Conservative 11; Mismatches 9;

1 VRGRDAIILLTCAVHPLEIFDIITKLLAIFGLPMLVQAGITKVPYFVRAOGLIRACMLV 60
57 VRGRDAVILLTCAIHPLEIITIKLLAIIGLPMLVQAGITKVPYFVRAHGLIRACMLV 116
61 RKAAGHYVQWAFKLAALGTGYVDHLTPLODWAHAGLRDLAVAVEPVPVFSDEMKIIT 120
117 RKVAGHYVQWALMKLAALGTGYVDHLTPLRDWAHAGLRDLAVAVEPVPVFSDEMKIIT 176
121 WGADTAACGDIISGLPVSAARRGRIILGPADNFGQWRLLAPITAYSQQTRGLLGCIIT 180
177 WGADTAACGDIISGLPVSAARRGRIILGPADNFGQWRLLAPITAYSQQTRGLLGCIIT 236
181 SLTGRDNQVEGEVQVVSSTATQSFATCVNGVCTVVFHAGSKTLAGPKGPIITQMYTNVD 240
237 SLTGRDNQVEGEVQVVSSTATQSFATCVNGVCTVVFHAGSKTLAGPKGPIITQMYTNVD 296
241 QDLVGMQAPPAGRSMTPTCTCGSSDLVLTTRHADVPVRRRGRSGSLSPRPVSYLKSS 300
297 QDLVGMQAPPAGRSMTPTCTCGSSDLVLTTRHADVPVRRRGRSGSLSPRPVSYLKSS 356
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Qy 301 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVSMETMMR 341
Db 357 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVSMETMMR 397

RESULT 9
US-09-539-601-3
; Sequence 3, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 3010
; TYPE: PRP
; ORGANISM: Hepatitis C virus
US-09-539-601-3

Query Match 95.7%; Score 1702; DB 4; Length 3010;
Best Local Similarity 94.1%; Pred. No. 8.4e-164; Indels 0; Gaps 0;
Matches 321; Conservative 11; Mismatches 9;

1 VRGRDAIILLTCAVHPLEIFDIITKLLAIFGLPMLVQAGITKVPYFVRAOGLIRACMLV 60
866 VRGRDAVILLTCAIHPLEIITIKLLAIIGLPMLVQAGITKVPYFVRAHGLIRACMLV 925
61 RKAAGHYVQWAFKLAALGTGYVDHLTPLODWAHAGLRDLAVAVEPVPVFSDEMKIIT 120
926 RKVAGHYVQWALMKLAALGTGYVDHLTPLRDWAHAGLRDLAVAVEPVPVFSDEMKIIT 985
121 WGADTAACGDIISGLPVSAARRGRIILGPADNFGQWRLLAPITAYSQQTRGLLGCIIT 180
986 WGADTAACGDIISGLPVSAARRGRIILGPADNFGQWRLLAPITAYSQQTRGLLGCIIT 1045
181 SLTGRDNQVEGEVQVVSSTATQSFATCVNGVCTVVFHAGSKTLAGPKGPIITQMYTNVD 240
1046 SLTGRDNQVEGEVQVVSSTATQSFATCVNGVCTVVFHAGSKTLAGPKGPIITQMYTNVD 1105
241 QDLVGMQAPPAGRSMTPTCTCGSSDLVLTTRHADVPVRRRGRSGSLSPRPVSYLKSS 300
1106 QDLVGMQAPPAGRSMTPTCTCGSSDLVLTTRHADVPVRRRGRSGSLSPRPVSYLKSS 1165
301 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVSMETMMR 341
1166 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVSMETMMR 1206

RESULT 10
US-09-539-601-21
; Sequence 21, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 21
; LENGTH: 3010
; TYPE: PRP
; ORGANISM: Hepatitis C virus
US-09-539-601-21
```


Query Match 95.7%; Score 1702; DB 4; Length 3010;
Best Local Similarity 94.1%; Pred. No. 8.4e-164;
Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

QY 1 VRGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVLAQGITKVPYFVRAOGLIRACMLV 60
DB VRGRDAVILLTCAIHPELIFTITKILLAILGLPMLVLAQGITKVPYFVRAHGLIRACMLV 925
QY 61 RKAAGHYVQWAFMKLAALGTYYVDHLTPLODWAHAGLRDLAVAVPVPVFSMEVKIIT 120
DB RKVAGGHVQWALMKLAALGTYYVDHLTPLRDWAHAGLRDLAVAVPVPVFSMETKVIIT 985
QY 121 WGADTAACGDIISGLPVSAARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 180
DB WGADTAACGDIILGLPVSAARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 1045
QY 181 SLGRDKNQVEGEVQVNVSTATQSFATCVNGVCHVTVPFHGAGSKTLAGPKGPITQMYTNVD 240
DB SLGRDKNQVEGEVQVNVSTATQSFATCVNGVCHVTVPFHGAGSKTLAGPKGPITQMYTNVD 1105
QY 241 QDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPVRRGRDSRGSLLSPRPVSYLKGS 300
DB QDLVGMQAPPGARSLTCTCGSSDLYLVTRHADVIPVRRGRDSRGSLLSPRPVSYLKGS 1165
QY 301 GGPLPCPSGHAVGIFRAAUCTRGVAKAVDFIPVSMETTM 341
DB GGPLPCPSGHAVGIFRAAUCTRGVAKAVDFIPVSMETTM 1206

RESULT 11
US-09-539-601-27
; Sequence 27, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 27
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-27

Query Match 95.7%; Score 1702; DB 4; Length 3010;
Best Local Similarity 94.1%; Pred. No. 8.4e-164;
Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

QY 1 VRGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVLAQGITKVPYFVRAOGLIRACMLV 60
DB VRGRDAVILLTCAIHPELIFTITKILLAILGLPMLVLAQGITKVPYFVRAHGLIRACMLV 925
QY 61 RKAAGHYVQWAFMKLAALGTYYVDHLTPLODWAHAGLRDLAVAVPVPVFSMEVKIIT 120
DB RKVAGGHVQWALMKLAALGTYYVDHLTPLRDWAHAGLRDLAVAVPVPVFSMETKVIIT 985
QY 121 WGADTAACGDIISGLPVSAARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 180
DB WGADTAACGDIILGLPVSAARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 1045
QY 181 SLGRDKNQVEGEVQVNVSTATQSFATCVNGVCHVTVPFHGAGSKTLAGPKGPITQMYTNVD 240
DB SLGRDKNQVEGEVQVNVSTATQSFATCVNGVCHVTVPFHGAGSKTLAGPKGPITQMYTNVD 1105
QY 241 QDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPVRRGRDSRGSLLSPRPVSYLKGS 300
DB QDLVGMQAPPGARSLTCTCGSSDLYLVTRHADVIPVRRGRDSRGSLLSPRPVSYLKGS 1165

QY 301 GGPLPCPSGHAVGIFRAAUCTRGVAKAVDFIPVSMETTM 341
DB 1166 GGPLPCPSGHAVGIFRAAUCTRGVAKAVDFIPVSMETTM 1206

RESULT 12
US-09-263-933-4
; Sequence 4, Application US/09263933
; Patent No. 6280940
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/263,933
; CURRENT FILING DATE: 1999-03-08
; EARLIER APPLICATION NUMBER: 09/129,611
; EARLIER FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
US-09-263-933-4

Query Match 95.5%; Score 1698; DB 3; Length 1692;
Best Local Similarity 94.1%; Pred. No. 9.2e-164;
Matches 320; Conservative 12; Mismatches 8; Indels 0; Gaps 0;

QY 2 RGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVLAQGITKVPYFVRAOGLIRACMLV 61
DB 146 RGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVLAQGITKVPYFVRAOGLIRACMLV 205
QY 62 KAAGGHVQWAFMKLAALGTYYVDHLTPLODWAHAGLRDLAVAVPVPVFSMEVKIIT 121
DB KVAGGHVQWAFMKLAALGTYYVDHLTPLRDWAHAGLRDLAVAVPVPVFSMETKVIIT 265
QY 122 GADTAACGDIISGLPVSAARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 181
DB GADTAACGDIILGLPVSAARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 325
QY 182 LTGRDKNQVEGEVQVNVSTATQSFATCVNGVCHVTVPFHGAGSKTLAGPKGPITQMYTNVD 241
DB LTGRDKNQVEGEVQVNVSTATQSFATCVNGVCHVTVPFHGAGSKTLAGPKGPITQMYTNVD 385
QY 242 DLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPVRRGRDSRGSLLSPRPVSYLKGS 301
DB DLVGMQAPPGARSLTCTCGSSDLYLVTRHADVIPVRRGRDSRGSLLSPRPVSYLKGS 445
QY 302 GGPLPCPSGHAVGIFRAAUCTRGVAKAVDFIPVSMETTM 341
DB 446 GGPLPCPSGHAVGIFRAAUCTRGVAKAVDFIPVSMETTM 485

RESULT 13
US-09-919-901-4
; Sequence 4, Application US/09919901
; Patent No. 6599738
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; CURRENT FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08

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; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRN
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-919-901-4

Query Match
Best Local Similarity 95.5%; Score 1698; DB 4; Length 1692;
Matches 320; Conservative 12; Mismatches 8; Indels 0; Gaps 0;

Qy 2 RGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVLAQGITKVPYFVRAOGLIHACMLVR 61
Db 146 RGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVLAQGITKVPYFVRAOGLIHACMLVR 205
Qy 62 KAAGGHVQVMAFMKLAALTGTYVVDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIITW 121
Db 206 KVAGGHVQVMAFMKLGALTGTYIYNHLTPLRDWAHAGLRDLAVAVEPVSFSDMEVKIITW 265
Qy 122 GADTAACGDIISGLPVSARRGKILLGPADNFEQGWRLAPITAYSQOIRGLLGCIIITS 181
Db 266 GADTAACGDIISGLPVSARRGKILLGPADNFEQGWRLAPITAYSQOIRGLLGCIIITS 325
Qy 182 LTGRDKNQVEGEVQVSTATQSFATCVNGVCMVTFHAGSKTLAGPKGPIQMTYTNVDQ 241
Db 326 LTGRDKNQVEGEVQVSTATQSFATCVNGVCMVTFHAGSKTLAGPKGPIQMTYTNVDQ 385
Qy 242 DLVGWQAPPGARSMTPTCTCGSSDLVYTRHADVIPVRRGDSRGSLLSPRPVSYLKSSG 301
Db 386 DLVGWQAPPGARSMTPTCTCGSSDLVYTRHADVIPVRRGDSRGSLLSPRPVSYLKSSG 445
Qy 302 GPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 341
Db 446 GPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 14
US-10-191-966-4
; Sequence 4, Application US/10191966
; Patent No. 6790612
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191,966
; PRIOR FILING DATE: 2002-07-10
; PRIOR APPLICATION NUMBER: US/09/263,933
; PRIOR FILING DATE: 1998-03-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRN
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-10-191-966-4

Query Match
Best Local Similarity 95.5%; Score 1698; DB 4; Length 1692;
Matches 320; Conservative 12; Mismatches 8; Indels 0; Gaps 0;

Qy 2 RGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVLAQGITKVPYFVRAOGLIHACMLVR 61
Db 146 RGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVLAQGITKVPYFVRAOGLIHACMLVR 205
Qy 62 KAAGGHVQVMAFMKLAALTGTYVVDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIITW 121
Db 206 KVAGGHVQVMAFMKLGALTGTYIYNHLTPLRDWAHAGLRDLAVAVEPVSFSDMEVKIITW 265
Qy 122 GADTAACGDIISGLPVSARRGKILLGPADNFEQGWRLAPITAYSQOIRGLLGCIIITS 181
Db 266 GADTAACGDIISGLPVSARRGKILLGPADNFEQGWRLAPITAYSQOIRGLLGCIIITS 325
Qy 182 LTGRDKNQVEGEVQVSTATQSFATCVNGVCMVTFHAGSKTLAGPKGPIQMTYTNVDQ 241
Db 326 LTGRDKNQVEGEVQVSTATQSFATCVNGVCMVTFHAGSKTLAGPKGPIQMTYTNVDQ 385
Qy 242 DLVGWQAPPGARSMTPTCTCGSSDLVYTRHADVIPVRRGDSRGSLLSPRPVSYLKSSG 301
Db 386 DLVGWQAPPGARSMTPTCTCGSSDLVYTRHADVIPVRRGDSRGSLLSPRPVSYLKSSG 445
Qy 302 GPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 341
Db 446 GPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 15
US-09-263-933-2
; Sequence 2, Application US/09263933
; Patent No. 6280940
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/263,933
; CURRENT FILING DATE: 1999-03-08
; EARLIER APPLICATION NUMBER: 09/129,611
; EARLIER FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 2307
; TYPE: PRN
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-263-933-2

Query Match
Best Local Similarity 95.5%; Score 1698; DB 3; Length 2307;
Matches 320; Conservative 12; Mismatches 8; Indels 0; Gaps 0;

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Db 238 RGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVLAQGITKVPYFVRAOGLIHACMLVR 297
Qy 62 KAAGGHVQVMAFMKLAALTGTYVVDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIITW 121
Db 298 KVAGGHVQVMAFMKLGALTGTYIYNHLTPLRDWAHAGLRDLAVAVEPVSFSDMEVKIITW 357
Qy 122 GADTAACGDIISGLPVSARRGKILLGPADNFEQGWRLAPITAYSQOIRGLLGCIIITS 181
Db 358 GADTAACGDIISGLPVSARRGKILLGPADNFEQGWRLAPITAYSQOIRGLLGCIIITS 417
Qy 182 LTGRDKNQVEGEVQVSTATQSFATCVNGVCMVTFHAGSKTLAGPKGPIQMTYTNVDQ 241
Db 418 LTGRDKNQVEGEVQVSTATQSFATCVNGVCMVTFHAGSKTLAGPKGPIQMTYTNVDQ 477
Qy 242 DLVGWQAPPGARSMTPTCTCGSSDLVYTRHADVIPVRRGDSRGSLLSPRPVSYLKSSG 301
Db 478 DLVGWQAPPGARSMTPTCTCGSSDLVYTRHADVIPVRRGDSRGSLLSPRPVSYLKSSG 537
Qy 302 GPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 341
Db 478 DLVGWQAPPGARSMTPTCTCGSSDLVYTRHADVIPVRRGDSRGSLLSPRPVSYLKSSG 537
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Db 538 GPLLCPSGHAVGIFRAAVCTRGVAKAVDFVPVSEMETMR 577

Search completed: May 26, 2005, 22:03:43
Job time : 20.7908 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: May 26, 2005, 21:58:09 ; Search time 59.3724 Seconds
(without alignments)
1981.317 Million cell updates/sec

Title: US-10-650-585-14

Perfect score: 1778

Sequence: 1 VRGGRDAIILLTCAVHPELI.....RGVAKAVDFIPVSMETMR 341

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1462099 seqs, 344972447 residues

Total number of hits satisfying chosen parameters: 1462099

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries.

Database : Published Applications AA:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
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9: /cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep.*
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12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
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16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1778	100.0	341	13	US-10-017-736-14
2	1778	100.0	341	15	US-10-650-585-14
3	1778	100.0	352	13	US-10-017-736-13
4	1778	100.0	352	15	US-10-650-585-13
5	1778	100.0	380	13	US-10-017-736-12
6	1778	100.0	380	15	US-10-650-585-12
7	1778	100.0	393	13	US-10-017-736-11
8	1778	100.0	393	15	US-10-650-585-11
9	1778	100.0	409	13	US-10-017-736-2
10	1778	100.0	409	15	US-10-650-585-2
11	1702	95.7	2201	13	US-10-029-907-3
12	1702	95.7	2201	14	US-10-309-561-3
13	1702	95.7	2201	16	US-10-789-355-3
					Sequence 14, Appl
					Sequence 14, Appl
					Sequence 13, Appl
					Sequence 13, Appl
					Sequence 12, Appl
					Sequence 12, Appl
					Sequence 11, Appl
					Sequence 11, Appl
					Sequence 2, Appl
					Sequence 2, Appl
					Sequence 3, Appl
					Sequence 3, Appl

14	1702	95.7	3010	15	US-10-467-000-1	Sequence 1, Appl
15	1698	95.5	1692	10	US-09-919-901-4	Sequence 4, Appl
16	1698	95.5	1692	14	US-10-191-966-4	Sequence 4, Appl
17	1698	95.5	2307	10	US-09-919-901-2	Sequence 2, Appl
18	1698	95.5	2307	14	US-10-191-966-2	Sequence 2, Appl
19	1697	95.4	3010	16	US-10-333-449A-34	Sequence 34, Appl
20	1695	95.3	1692	10	US-09-919-901-11	Sequence 11, Appl
21	1695	95.3	1692	14	US-10-191-966-11	Sequence 11, Appl
22	1695	95.3	2307	10	US-09-919-901-9	Sequence 9, Appl
23	1695	95.3	2307	14	US-10-191-966-9	Sequence 9, Appl
24	1686	94.8	1692	10	US-09-919-901-18	Sequence 18, Appl
25	1686	94.8	1692	14	US-10-191-966-18	Sequence 18, Appl
26	1686	94.8	2307	10	US-09-919-901-16	Sequence 16, Appl
27	1686	94.8	2307	14	US-10-191-966-16	Sequence 16, Appl
28	1649	92.7	2201	13	US-10-085-476-2	Sequence 2, Appl
29	1589	89.4	303	13	US-10-017-736-10	Sequence 10, Appl
30	1589	89.4	303	15	US-10-650-585-10	Sequence 10, Appl
31	1589	89.4	334	13	US-10-017-736-4	Sequence 4, Appl
32	1589	89.4	334	15	US-10-650-585-4	Sequence 4, Appl
33	1580	88.9	303	13	US-10-017-736-18	Sequence 18, Appl
34	1580	88.9	303	15	US-10-650-585-18	Sequence 18, Appl
35	1579	88.8	303	13	US-10-017-736-16	Sequence 16, Appl
36	1579	88.8	303	15	US-10-650-585-16	Sequence 16, Appl
37	1570	88.3	301	13	US-10-017-736-17	Sequence 17, Appl
38	1570	88.3	301	15	US-10-650-585-17	Sequence 17, Appl
39	1569	88.2	3011	9	US-09-742-659-4	Sequence 4, Appl
40	1569	88.2	3011	10	US-09-891-894-3	Sequence 3, Appl
41	1569	88.2	3011	14	US-10-184-150-3	Sequence 3, Appl
42	1569	88.2	3011	15	US-10-328-997-3	Sequence 3, Appl
43	1569	88.2	3012	9	US-09-338-076-2	Sequence 2, Appl
44	1569	88.2	3012	10	US-09-995-937-2	Sequence 2, Appl
45	1569	88.2	3012	10	US-09-917-563-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1
US-10-017-736-14
; Sequence 14, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736-14

Query Match	100.0%	Score 1778;	DB 13;	Length 341;
Best Local Similarity	100.0%	Pred. No. 6.8e-169;		
Matches 341;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	VRGGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLQAGITKVPYFVRAQGLIRACMLV	60	
Db	1	VRGGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLQAGITKVPYFVRAQGLIRACMLV	60	
Qy	61	RKAAGHYVQMAFKLAALTGTYYVYDHLTPQDWAHAGLRDLAVAVPFI	120	
Db	61	RKAAGHYVQMAFKLAALTGTYYVYDHLTPQDWAHAGLRDLAVAVPFI	120	
Qy	121	WGADTAAACGDIISGLPVSARRGREILLGPADNFEQGWRLLPITATYSQOTRGLGCIIT	180	
Db	121	WGADTAAACGDIISGLPVSARRGREILLGPADNFEQGWRLLPITATYSQOTRGLGCIIT	180	

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Qy 181 SLTGRDNQVEGEVQVWVSTATQSFATCVCNGVCTVFGAGSKTLAGPKGPIQMYTNVD 240
Db 181 SLTGRDNQVEGEVQVWVSTATQSFATCVCNGVCTVFGAGSKTLAGPKGPIQMYTNVD 240
Qy 241 QDLVGWQAPPAGARSMTPTCTGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKSS 300
Db 241 QDLVGWQAPPAGARSMTPTCTGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKSS 300
Qy 301 GGPLLCPSGHAGVGFRAAUCTRGVAKAVDFIPVESMETTMR 341
Db 301 GGPLLCPSGHAGVGFRAAUCTRGVAKAVDFIPVESMETTMR 341
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RESULT 2

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US-10-650-585-14
; Sequence 14, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; PRIOR FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-14
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Query Match 100.0%; Score 1778; DB 15; Length 341;
Best Local Similarity 100.0%; Pred. No. 6.8e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 1 VRGRDAIILLTCAVHPELIDITKLLLAIFGPLMLVLAQGITKVPYFVRAQGLIRACMLV 60
Db 1 VRGRDAIILLTCAVHPELIDITKLLLAIFGPLMLVLAQGITKVPYFVRAQGLIRACMLV 60
Qy 61 RKAAGGHYVQWAFMKLAALGTYYVDHLTLPQDWAHAGLRDLAVAVEPVIFSDMEVKIIT 120
Db 61 RKAAGGHYVQWAFMKLAALGTYYVDHLTLPQDWAHAGLRDLAVAVEPVIFSDMEVKIIT 120
Qy 121 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQOTRGLGCIIT 180
Db 121 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQOTRGLGCIIT 180
Qy 181 SLTGRDNQVEGEVQVWVSTATQSFATCVCNGVCTVFGAGSKTLAGPKGPIQMYTNVD 240
Db 181 SLTGRDNQVEGEVQVWVSTATQSFATCVCNGVCTVFGAGSKTLAGPKGPIQMYTNVD 240
Qy 241 QDLVGWQAPPAGARSMTPTCTGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKSS 300
Db 241 QDLVGWQAPPAGARSMTPTCTGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKSS 300
Qy 301 GGPLLCPSGHAGVGFRAAUCTRGVAKAVDFIPVESMETTMR 341
Db 301 GGPLLCPSGHAGVGFRAAUCTRGVAKAVDFIPVESMETTMR 341
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RESULT 3

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US-10-017-736-13
; Sequence 13, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
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; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-13
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Best Local Similarity 100.0%; Pred. No. 7.1e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 1 VRGRDAIILLTCAVHPELIDITKLLLAIFGPLMLVLAQGITKVPYFVRAQGLIRACMLV 60
Db 12 VRGRDAIILLTCAVHPELIDITKLLLAIFGPLMLVLAQGITKVPYFVRAQGLIRACMLV 71
Qy 61 RKAAGGHYVQWAFMKLAALGTYYVDHLTLPQDWAHAGLRDLAVAVEPVIFSDMEVKIIT 120
Db 72 RKAAGGHYVQWAFMKLAALGTYYVDHLTLPQDWAHAGLRDLAVAVEPVIFSDMEVKIIT 131
Qy 121 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQOTRGLGCIIT 180
Db 132 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQOTRGLGCIIT 191
Qy 181 SLTGRDNQVEGEVQVWVSTATQSFATCVCNGVCTVFGAGSKTLAGPKGPIQMYTNVD 240
Db 192 SLTGRDNQVEGEVQVWVSTATQSFATCVCNGVCTVFGAGSKTLAGPKGPIQMYTNVD 251
Qy 241 QDLVGWQAPPAGARSMTPTCTGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKSS 300
Db 252 QDLVGWQAPPAGARSMTPTCTGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKSS 311
Qy 301 GGPLLCPSGHAGVGFRAAUCTRGVAKAVDFIPVESMETTMR 341
Db 312 GGPLLCPSGHAGVGFRAAUCTRGVAKAVDFIPVESMETTMR 352
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RESULT 4

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US-10-650-585-13
; Sequence 13, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-13
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Query Match 100.0%; Score 1778; DB 15; Length 352;
Best Local Similarity 100.0%; Pred. No. 7.1e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 12 VRGRDAIILLTCAVHPELIDITKLLLAIFGPLMLVLAQGITKVPYFVRAQGLIRACMLV 71
Qy 61 RKAAGGHYVQWAFMKLAALGTYYVDHLTLPQDWAHAGLRDLAVAVEPVIFSDMEVKIIT 120
Db 72 RKAAGGHYVQWAFMKLAALGTYYVDHLTLPQDWAHAGLRDLAVAVEPVIFSDMEVKIIT 131
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QY 121 WGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQOTRGLGCIIT 180
DB 132 WGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQOTRGLGCIIT 191
QY 181 SLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTFVHGAGSKTLAPKGPITQMTYNDV 240
DB 192 SLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTFVHGAGSKTLAPKGPITQMTYNDV 251
QY 241 QDLVGHQAPPAGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 300
DB 252 QDLVGHQAPPAGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 311
QY 301 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341
DB 312 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352

RESULT 5
US-10-017-736-12
; Sequence 12, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-12

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Best Local Similarity 100.0%; Pred. No. 7.9e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VRGGRDAIILLTCAVHPELIFDITKLLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 60
DB 40 VRGGRDAIILLTCAVHPELIFDITKLLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 99
QY 61 RKAAGHYVQMAFMKLAALTGTYYVDHLTPLDQMAHAGRLDLAVAVEPFIQSDMEVKIIT 120
DB 100 RKAAGHYVQMAFMKLAALTGTYYVDHLTPLDQMAHAGRLDLAVAVEPFIQSDMEVKIIT 159
QY 121 WGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQOTRGLGCIIT 180
DB 160 WGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQOTRGLGCIIT 219
QY 181 SLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTFVHGAGSKTLAPKGPITQMTYNDV 240
DB 220 SLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTFVHGAGSKTLAPKGPITQMTYNDV 279
QY 241 QDLVGHQAPPAGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 300
DB 280 QDLVGHQAPPAGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 339
QY 301 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341
DB 340 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 380

RESULT 6
US-10-650-585-12
; Sequence 12, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.

QY 1 VRGGRDAIILLTCAVHPELIFDITKLLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 60
DB 53 VRGGRDAIILLTCAVHPELIFDITKLLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 112

Query Match 100.0%; Score 1778; DB 13; Length 393;
Best Local Similarity 100.0%; Pred. No. 8.3e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-12

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Best Local Similarity 100.0%; Pred. No. 7.9e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VRGGRDAIILLTCAVHPELIFDITKLLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 60
DB 40 VRGGRDAIILLTCAVHPELIFDITKLLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 99
QY 61 RKAAGHYVQMAFMKLAALTGTYYVDHLTPLDQMAHAGRLDLAVAVEPFIQSDMEVKIIT 120
DB 100 RKAAGHYVQMAFMKLAALTGTYYVDHLTPLDQMAHAGRLDLAVAVEPFIQSDMEVKIIT 159
QY 121 WGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQOTRGLGCIIT 180
DB 160 WGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQOTRGLGCIIT 219
QY 181 SLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTFVHGAGSKTLAPKGPITQMTYNDV 240
DB 220 SLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTFVHGAGSKTLAPKGPITQMTYNDV 279
QY 241 QDLVGHQAPPAGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 300
DB 280 QDLVGHQAPPAGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 339
QY 301 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341
DB 340 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 380

RESULT 7
US-10-017-736-11
; Sequence 11, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-11

Query Match 100.0%; Score 1778; DB 13; Length 393;
Best Local Similarity 100.0%; Pred. No. 8.3e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 61 RKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAVEPVIFSDMEVKIIT 120
DB 113 RKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAVEPVIFSDMEVKIIT 172
QY 121 WGAADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQOTRGLGCIIT 180
DB 173 WGAADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQOTRGLGCIIT 232
QY 181 SLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPITQMTNVND 240
DB 233 SLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPITQMTNVND 292
QY 241 QDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 300
DB 293 QDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 352
QY 301 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341
DB 353 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
RESULT 8
US-10-650-585-11
; Sequence 11, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; PRIOR FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-11

Query Match 100.0%; Score 1778; DB 15; Length 393;
Best Local Similarity 100.0%; Pred. No. 8.3e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 VRGGRDAIILLTCAVHPELIFDITKLLAIFGFLMWLQAGITKVPYFVRAQGLIRACMLV 60
DB 53 VRGGRDAIILLTCAVHPELIFDITKLLAIFGFLMWLQAGITKVPYFVRAQGLIRACMLV 112
QY 61 RKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAVEPVIFSDMEVKIIT 120
DB 113 RKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAVEPVIFSDMEVKIIT 172
QY 121 WGAADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQOTRGLGCIIT 180
DB 173 WGAADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQOTRGLGCIIT 232
QY 181 SLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPITQMTNVND 240
DB 233 SLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPITQMTNVND 292
QY 241 QDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 300
DB 293 QDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 352
QY 301 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341
DB 353 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
RESULT 9

US-10-017-736-2
; Sequence 2, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-2

Query Match 100.0%; Score 1778; DB 13; Length 409;
Best Local Similarity 100.0%; Pred. No. 8.8e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 VRGGRDAIILLTCAVHPELIFDITKLLAIFGFLMWLQAGITKVPYFVRAQGLIRACMLV 60
DB 57 VRGGRDAIILLTCAVHPELIFDITKLLAIFGFLMWLQAGITKVPYFVRAQGLIRACMLV 116
QY 61 RKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAVEPVIFSDMEVKIIT 120
DB 117 RKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAVEPVIFSDMEVKIIT 176
QY 121 WGAADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQOTRGLGCIIT 180
DB 177 WGAADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQOTRGLGCIIT 236
QY 181 SLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPITQMTNVND 240
DB 237 SLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPITQMTNVND 296
QY 241 QDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 300
DB 297 QDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 356
QY 301 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341
DB 357 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 10
US-10-650-585-2
; Sequence 2, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; PRIOR FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-2

Query Match 100.0%; Score 1778; DB 15; Length 409;
Best Local Similarity 100.0%; Pred. No. 8.8e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLOAGITKVPYFVRAOGLIRACMLV 60
 Db 57 VRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLOAGITKVPYFVRAOGLIRACMLV 116
 Qy 61 RKAAGGHYVQMAFMKLAALGTGYVDHLTPLODWAHAGLRDLAVAVEPFIQDMVKIIT 120
 Db 117 RKAAGGHYVQMAFMKLAALGTGYVDHLTPLODWAHAGLRDLAVAVEPFIQDMVKIIT 176
 Qy 121 WGADTAACGDIISGLPVSARRGREILLGPADNFGQGWRLAPITAYSQOTRGLGCIIT 180
 Db 177 WGADTAACGDIISGLPVSARRGREILLGPADNFGQGWRLAPITAYSQOTRGLGCIIT 236
 Qy 181 SLTGRDNQVEGEVQVWSTATQSFATCVNGVCTVPHGAGSKTLAPGPKGITQMTYNDV 240
 Db 237 SLTGRDNQVEGEVQVWSTATQSFATCVNGVCTVPHGAGSKTLAPGPKGITQMTYNDV 296
 Qy 241 QDLVGMQAPPGARSMPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 300
 Db 297 QDLVGMQAPPGARSMPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 356
 Qy 301 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVSMETMMR 341
 Db 357 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVSMETMMR 397

RESULT 11

US-10-029-907-3
 ; Sequence 3, Application US/10029907
 ; Publication No. US20020142350A1
 ; GENERAL INFORMATION:
 ; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
 ; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
 ; TITLE OF INVENTION: HEPATITIS C VIRUS
 ; FILE REFERENCE: 13/083
 ; CURRENT APPLICATION NUMBER: US/10/029,907
 ; CURRENT FILING DATE: 2001-12-21
 ; PRIOR FILING DATE: 60/257,857
 ; PRIOR FILING DATE: 2000-12-22
 ; NUMBER OF SEQ ID NOS: 25
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 3
 ; LENGTH: 2201
 ; TYPE: PRN
 ; ORGANISM: HCV
 ; FEATURE:
 ; NAME/KEY: VARIANT
 ; LOCATION: 882
 ; OTHER INFORMATION: Xaa is Lys or Arg
 ; NAME/KEY: VARIANT
 ; LOCATION: 1489
 ; OTHER INFORMATION: Xaa is Leu
 US-10-029-907-3

Query Match 95.7%; Score 1702; DB 13; Length 2201;
 Best Local Similarity 94.1%; Pred. No. 3.5e-160;
 Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;
 Qy 1 VRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLOAGITKVPYFVRAOGLIRACMLV 60
 Db 57 VRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLOAGITKVPYFVRAOGLIRACMLV 116
 Qy 61 RKAAGGHYVQMAFMKLAALGTGYVDHLTPLODWAHAGLRDLAVAVEPFIQDMVKIIT 120
 Db 117 RKAAGGHYVQMAFMKLAALGTGYVDHLTPLODWAHAGLRDLAVAVEPFIQDMVKIIT 176
 Qy 121 WGADTAACGDIISGLPVSARRGREILLGPADNFGQGWRLAPITAYSQOTRGLGCIIT 180
 Db 177 WGADTAACGDIISGLPVSARRGREILLGPADNFGQGWRLAPITAYSQOTRGLGCIIT 236
 Qy 181 SLTGRDNQVEGEVQVWSTATQSFATCVNGVCTVPHGAGSKTLAPGPKGITQMTYNDV 240
 Db 237 SLTGRDNQVEGEVQVWSTATQSFATCVNGVCTVPHGAGSKTLAPGPKGITQMTYNDV 296

Qy 241 QDLVGMQAPPGARSMPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 300
 Db 297 QDLVGMQAPPGARSMPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 356
 Qy 301 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVSMETMMR 341
 Db 357 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVSMETMMR 397

RESULT 12

US-10-309-561-3
 ; Sequence 3, Application US/10309561
 ; Publication No. US20030148348A1
 ; GENERAL INFORMATION:
 ; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
 ; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
 ; TITLE OF INVENTION: HEPATITIS C VIRUS
 ; FILE REFERENCE: 13/083
 ; CURRENT APPLICATION NUMBER: US/10/309,561
 ; CURRENT FILING DATE: 2002-12-04
 ; PRIOR FILING DATE: US/10/029,907
 ; PRIOR FILING DATE: 2001-12-21
 ; PRIOR FILING DATE: 60/257,857
 ; PRIOR FILING DATE: 2000-12-22
 ; NUMBER OF SEQ ID NOS: 25
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 3
 ; LENGTH: 2201
 ; TYPE: PRN
 ; ORGANISM: HCV
 ; FEATURE:
 ; NAME/KEY: VARIANT
 ; LOCATION: 882
 ; OTHER INFORMATION: Xaa is Lys or Arg
 ; NAME/KEY: VARIANT
 ; LOCATION: 1489
 ; OTHER INFORMATION: Xaa is Leu
 US-10-309-561-3

Query Match 95.7%; Score 1702; DB 14; Length 2201;
 Best Local Similarity 94.1%; Pred. No. 3.5e-160;
 Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 VRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLOAGITKVPYFVRAOGLIRACMLV 60
 Db 57 VRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLOAGITKVPYFVRAOGLIRACMLV 116
 Qy 61 RKAAGGHYVQMAFMKLAALGTGYVDHLTPLODWAHAGLRDLAVAVEPFIQDMVKIIT 120
 Db 117 RKAAGGHYVQMAFMKLAALGTGYVDHLTPLODWAHAGLRDLAVAVEPFIQDMVKIIT 176
 Qy 121 WGADTAACGDIISGLPVSARRGREILLGPADNFGQGWRLAPITAYSQOTRGLGCIIT 180
 Db 177 WGADTAACGDIISGLPVSARRGREILLGPADNFGQGWRLAPITAYSQOTRGLGCIIT 236
 Qy 181 SLTGRDNQVEGEVQVWSTATQSFATCVNGVCTVPHGAGSKTLAPGPKGITQMTYNDV 240
 Db 237 SLTGRDNQVEGEVQVWSTATQSFATCVNGVCTVPHGAGSKTLAPGPKGITQMTYNDV 296
 Qy 241 QDLVGMQAPPGARSMPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 300
 Db 297 QDLVGMQAPPGARSMPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 356
 Qy 301 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVSMETMMR 341
 Db 357 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVSMETMMR 397

RESULT 13

US-10-789-355-3
 ; Sequence 3, Application US/10789355

Qy	62	KAAGHYVQMAFMKLAALTGTYVVDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITW	121
Db	206	KVAGGHYVQMAFMKLGALTGTYYIYNHLTPLRDWAHAGLRDLAVAVEPVVFSMETKIITW	265
Qy	122	GADTAACGDIIISGLPVSARRGREILLGPADNFEQGWELLAPITAYSQOTRGLLGCIIIS	181
Db	266	GADTAACGDIIILGLPVSARRKEILLGPADSLEGRGWRLLAPITAYSQOTRGLLGCIIIS	325
Qy	182	LTGRDKNOVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPITQMYTNVDQ	241
Db	326	LTGRDKNOVEGEVQVSTATQSFATCVNGVCWTVYHGAGSKTLAGPKGPITQMYTNVDQ	385
Qy	242	DLVGQAPPGARSTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLLSRPVSVYLGSSG	301
Db	386	DLVGQAPPGARSLTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLLSRPVSVYLGSSG	445
Qy	302	GPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR	341
Db	446	GPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR	485

Search completed: May 26, 2005, 22:43:02
Job time : 60.5153 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: May 26, 2005, 21:44:29 ; Search time 16.947 Seconds
(without alignments)
1286.219 Million cell updates/sec

Title: US-10-650-585-15
Perfect score: 1532
Sequence: 1 AQLIRACMLVRKAAGHYV.....RGVAKAVDFIPVSMETTM 292

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA:*
1: /cgn2_6/ptodata/1/iaa/5A COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/5B COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/6A COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/6B COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/PTTUS COMB.pep:*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1532	100.0	292	4	US-10-017-736C-15
2	1532	100.0	303	4	US-10-017-736C-10
3	1532	100.0	334	4	US-10-017-736C-4
4	1532	100.0	341	4	US-10-017-736C-14
5	1532	100.0	352	4	US-10-017-736C-13
6	1532	100.0	380	4	US-10-017-736C-12
7	1532	100.0	393	4	US-10-017-736C-11
8	1532	100.0	409	4	US-10-017-736C-2
9	1523	99.3	303	4	US-10-017-736C-18
10	1522	99.3	303	4	US-10-017-736C-16
11	1513	98.8	301	4	US-10-017-736C-17
12	1473	96.1	1692	3	US-09-263-933-4
13	1473	96.1	1692	4	US-09-919-901-4
14	1473	96.1	1692	4	US-09-919-901-4
15	1473	96.1	2201	4	US-09-539-601-6
16	1473	96.1	2201	4	US-09-539-601-15
17	1473	96.1	2201	4	US-10-029-907-3
18	1473	96.1	2307	3	US-09-263-933-2
19	1473	96.1	2307	4	US-09-919-901-2
20	1473	96.1	2307	4	US-10-191-966-2
21	1473	96.1	3010	4	US-09-539-601-3
22	1473	96.1	3010	4	US-09-539-601-21
23	1473	96.1	3010	4	US-09-539-601-27
24	1470	96.0	1692	3	US-09-263-933-11
25	1470	96.0	1692	4	US-09-919-901-11
26	1470	96.0	1692	4	US-10-191-966-11
27	1470	96.0	2307	3	US-09-263-933-9

28	1470	96.0	2307	4	US-09-919-901-9	Sequence 9, Appli
29	1470	96.0	2307	4	US-10-191-966-9	Sequence 9, Appli
30	1466	95.7	3010	4	US-09-539-601-33	Sequence 33, Appl
31	1461	95.4	1692	3	US-09-263-933-18	Sequence 18, Appl
32	1461	95.4	1692	4	US-09-919-901-18	Sequence 18, Appl
33	1461	95.4	1692	4	US-10-191-966-18	Sequence 18, Appl
34	1461	95.4	2307	3	US-09-263-933-16	Sequence 16, Appl
35	1461	95.4	2307	4	US-09-919-901-16	Sequence 16, Appl
36	1461	95.4	2307	4	US-10-191-966-16	Sequence 16, Appl
37	1450	94.6	3010	3	US-09-014-416-3	Sequence 3, Appli
38	1424	93.0	2013	1	US-08-324-977-12	Sequence 12, Appl
39	1424	93.0	2013	2	US-08-384-616-12	Sequence 12, Appl
40	1424	93.0	2013	2	US-08-904-686A-12	Sequence 12, Appl
41	1424	93.0	2013	3	US-09-315-850-12	Sequence 12, Appl
42	1424	93.0	2201	3	US-08-952-981A-2	Sequence 2, Appli
43	1424	93.0	2620	1	US-08-324-977-32	Sequence 32, Appl
44	1424	93.0	2620	2	US-08-384-616-32	Sequence 32, Appl
45	1424	93.0	2620	2	US-08-904-686A-32	Sequence 32, Appl

ALIGNMENTS

RESULT 1
US-10-017-736C-15
; Sequence 15, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibault, Diane
; APPLICANT: Lamirre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 292
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-15

Query Match		100.0%;	Score 1532;	DB 4;	Length 292;
Best Local Similarity		100.0%;	Pred. No. 1.1e-145;		
Matches 292;		Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	AQGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV	60		
Db	1	AQGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV	60		
Qy	61	IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPFEGQGWELLAPITAYSQ	120		
Db	61	IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPFEGQGWELLAPITAYSQ	120		
Qy	121	QTRGLIGCIITSLTGRDKNQVEGEVQVSTATQSFATCNGVCWTVFHAGSGKTLGAPK	180		
Db	121	QTRGLIGCIITSLTGRDKNQVEGEVQVSTATQSFATCNGVCWTVFHAGSGKTLGAPK	180		
Qy	181	GPITQMTVNDQDLVGMQAPPGARSMTPTCGSSDLYLVTRHADVIIVRRRGDSRGSLLS	240		
Db	181	GPITQMTVNDQDLVGMQAPPGARSMTPTCGSSDLYLVTRHADVIIVRRRGDSRGSLLS	240		
Qy	241	PRPVSYLKGSSGPLLCPSGHAVGIIFRAAVCTRGVAKAVDFIPVESMETTMR	292		
Db	241	PRPVSYLKGSSGPLLCPSGHAVGIIFRAAVCTRGVAKAVDFIPVESMETTMR	292		

RESULT 2

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US-10-017-736C-10
; Sequence 10, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736C-10

Query Match      100.0%; Score 1532; DB 4; Length 303;
Best Local Similarity 100.0%; Pred. No. 1.1e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLDQWAHAGRLDLAVAVEPV 60
Db 12 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLDQWAHAGRLDLAVAVEPV 71
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREIILGPADNPEGQGWRLAPITAYSQ 120
Db 72 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREIILGPADNPEGQGWRLAPITAYSQ 131
Qy 121 QTRGLLGCIITSLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLGAPK 180
Db 132 QTRGLLGCIITSLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLGAPK 191
Qy 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGDSRGSLLS 240
Db 192 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGDSRGSLLS 251
Qy 241 PRPVSYLKSGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 252 PRPVSYLKSGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 303

RESULT 3
US-10-017-736C-4
; Sequence 4, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736C-4

Query Match      100.0%; Score 1532; DB 4; Length 334;
Best Local Similarity 100.0%; Pred. No. 1.1e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLDQWAHAGRLDLAVAVEPV 60
Db 12 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLDQWAHAGRLDLAVAVEPV 71
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREIILGPADNPEGQGWRLAPITAYSQ 120
Db 72 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREIILGPADNPEGQGWRLAPITAYSQ 131
Qy 121 QTRGLLGCIITSLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLGAPK 180
Db 132 QTRGLLGCIITSLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLGAPK 191
Qy 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGDSRGSLLS 240
Db 192 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGDSRGSLLS 251
Qy 241 PRPVSYLKSGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 252 PRPVSYLKSGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 303

US-10-017-736C-14
; Sequence 14, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736C-14

Query Match      100.0%; Score 1532; DB 4; Length 341;
Best Local Similarity 100.0%; Pred. No. 1.3e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLDQWAHAGRLDLAVAVEPV 60
Db 50 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLDQWAHAGRLDLAVAVEPV 109
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREIILGPADNPEGQGWRLAPITAYSQ 120
Db 110 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREIILGPADNPEGQGWRLAPITAYSQ 169
Qy 121 QTRGLLGCIITSLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLGAPK 180
Db 170 QTRGLLGCIITSLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLGAPK 229
Qy 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGDSRGSLLS 240
Db 230 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGDSRGSLLS 289
Qy 241 PRPVSYLKSGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 290 PRPVSYLKSGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 341
```

```
RESULT 5
US-10-017-736C-13
; Sequence 13, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRP
; ORGANISM: HCV
US-10-017-736C-13

Query Match      100.0%; Score 1532; DB 4; Length 352;
Best Local Similarity 100.0%; Pred. No. 1.4e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYVVDHLTPLODWAHAGRLDLA VEPV 60
DB 61 AOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYVVDHLTPLODWAHAGRLDLA VEPV 120
QY 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEGQWRL LAPITAYSQ 120
DB 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEGQWRL LAPITAYSQ 180
QY 121 QTRGLLGCIITSITGRDKNQVEGEVQVSTATQSFATC VNGVCWTVFHGAGSKTLAGPK 180
DB 181 QTRGLLGCIITSITGRDKNQVEGEVQVSTATQSFATC VNGVCWTVFHGAGSKTLAGPK 240
QY 181 GPITOMYTNVDQDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVI PVRRGRGSRGSLLS 240
DB 241 GPITOMYTNVDQDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVI PVRRGRGSRGSLLS 300
QY 241 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
DB 301 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
```

```
RESULT 6
US-10-017-736C-12
; Sequence 12, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRP
; ORGANISM: HCV
US-10-017-736C-12
```

```
Query Match      100.0%; Score 1532; DB 4; Length 380;
Best Local Similarity 100.0%; Pred. No. 1.5e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYVVDHLTPLODWAHAGRLDLA VEPV 60
DB 89 AOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYVVDHLTPLODWAHAGRLDLA VEPV 148
QY 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEGQWRL LAPITAYSQ 120
DB 149 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEGQWRL LAPITAYSQ 208
QY 121 QTRGLLGCIITSITGRDKNQVEGEVQVSTATQSFATC VNGVCWTVFHGAGSKTLAGPK 180
DB 209 QTRGLLGCIITSITGRDKNQVEGEVQVSTATQSFATC VNGVCWTVFHGAGSKTLAGPK 268
QY 181 GPITOMYTNVDQDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVI PVRRGRGSRGSLLS 240
DB 269 GPITOMYTNVDQDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVI PVRRGRGSRGSLLS 328
QY 241 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
DB 329 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 380

RESULT 7
US-10-017-736C-11
; Sequence 11, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRP
; ORGANISM: HCV
US-10-017-736C-11
```

```
Query Match      100.0%; Score 1532; DB 4; Length 393;
Best Local Similarity 100.0%; Pred. No. 1.6e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYVVDHLTPLODWAHAGRLDLA VEPV 60
DB 102 AOGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYVVDHLTPLODWAHAGRLDLA VEPV 161
QY 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEGQWRL LAPITAYSQ 120
DB 162 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEGQWRL LAPITAYSQ 221
QY 121 QTRGLLGCIITSITGRDKNQVEGEVQVSTATQSFATC VNGVCWTVFHGAGSKTLAGPK 180
DB 222 QTRGLLGCIITSITGRDKNQVEGEVQVSTATQSFATC VNGVCWTVFHGAGSKTLAGPK 281
QY 181 GPITOMYTNVDQDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVI PVRRGRGSRGSLLS 240
DB 282 GPITOMYTNVDQDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVI PVRRGRGSRGSLLS 341
QY 241 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
DB 342 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
```

```

RESULT 8
US-10-017-736C-2
; Sequence 18, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-2

Query Match      100.0%; Score 1532; DB 4; Length 409;
Best Local Similarity 100.0%; Pred. No. 1.7e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYVVDHLTPLODWAHAGRLDLAVAVEPV 60
DB 106 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYVVDHLTPLODWAHAGRLDLAVAVEPV 165
QY 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 120
DB 166 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 225
QY 121 QTRGLGCIITSITGRDKNOVEGEVQVSTATOSFLATCVNGVCTVVFHAGSKTLGPK 180
DB 226 QTRGLGCIITSITGRDKNOVEGEVQVSTATOSFLATCVNGVCTVVFHAGSKTLGPK 285
QY 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 240
DB 286 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 345
QY 241 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
DB 346 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

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RESULT 9
US-10-017-736C-18
; Sequence 18, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-18

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Query Match      99.4%; Score 1523; DB 4; Length 303;
Best Local Similarity 99.7%; Pred. No. 8.9e-145;
Matches 291; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYVVDHLTPLODWAHAGRLDLAVAVEPV 60
DB 12 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYVVDHLTPLODWAHAGRLDLAVAVEPV 71
QY 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 120
DB 72 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 131
QY 121 QTRGLGCIITSITGRDKNOVEGEVQVSTATOSFLATCVNGVCTVVFHAGSKTLGPK 180
DB 132 QTRGLGCIITSITGRDKNOVEGEVQVSTATOSFLATCVNGVCTVVFHAGSKTLGPK 191
QY 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 240
DB 192 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 251
QY 241 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
DB 252 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 303

```

```

RESULT 10
US-10-017-736C-16
; Sequence 16, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-16

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```

Query Match      99.3%; Score 1522; DB 4; Length 303;
Best Local Similarity 99.7%; Pred. No. 1.1e-144;
Matches 291; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYVVDHLTPLODWAHAGRLDLAVAVEPV 60
DB 12 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYVVDHLTPLODWAHAGRLDLAVAVEPV 71
QY 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 120
DB 72 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 131
QY 121 QTRGLGCIITSITGRDKNOVEGEVQVSTATOSFLATCVNGVCTVVFHAGSKTLGPK 180
DB 132 QTRGLGCIITSITGRDKNOVEGEVQVSTATOSFLATCVNGVCTVVFHAGSKTLGPK 191
QY 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 240
DB 192 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 251
QY 241 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
DB 252 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 303

```


RESULT 11

US-10-017-736C-17
; Sequence 17, Application US/10017736C

; Patent No. 6815159

; GENERAL INFORMATION:

; APPLICANT: Thibault, Diane

; APPLICANT: Lamarie, Daniel

; APPLICANT: Maurice, Roger

; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Armin

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease

; FILE REFERENCE: 13/082

; CURRENT APPLICATION NUMBER: US/10/017.736C

; CURRENT FILING DATE: 2001-12-14

; PRIOR APPLICATION NUMBER: 60/256,031

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 17

; LENGTH: 301

; TYPE: PRT

; ORGANISM: HCV

US-10-017-736C-17

Query Match 98.8%; Score 1513; DB 4; Length 301;

Best Local Similarity 99.3%; Pred. No. 8.9e-144;

Matches 290; Conservative 0; Mismatches 0; Indels 2; Gaps 1;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLODWAHAGRLDLAVAVPV 60

Db 12 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLODWAHAGRLDLAVAVPV 71

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 120

Db 72 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRL--PITAYSQ 129

Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHHGAGSKTLGAPK 180

Db 130 QTRGLGCIITSLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHHGAGSKTLGAPK 189

Qy 181 GPITQMTYNDQDLVGVQAPPGARSMTPTCTCGSSDLVLTVRHADVIPIVRRRGRDSRGLLS 240

Db 190 GPITQMTYNDQDLVGVQAPPGARSMTPTCTCGSSDLVLTVRHADVIPIVRRRGRDSRGLLS 249

Qy 241 PRPVSYLKGSGGPGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292

Db 250 PRPVSYLKGSGGPGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 301

RESULT 12

US-09-263-933-4

; Sequence 4, Application US/09263933

; Patent No. 6280940

; GENERAL INFORMATION:

; APPLICANT: Potts, Karen E.

; APPLICANT: Jackson, Roberta L.

; APPLICANT: Patick, Amy K.

; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT

; FILE REFERENCE: 0125-0005A

; CURRENT APPLICATION NUMBER: US/09/263,933

; CURRENT FILING DATE: 1999-03-08

; EARLIER APPLICATION NUMBER: 09/129,611

; NUMBER OF SEQ ID NOS: 33

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 4

; LENGTH: 1692

; TYPE: PRT

; ORGANISM: Artificial Sequence

US-09-263-933-4

Query Match 96.1%; Score 1473; DB 3; Length 1692;

Best Local Similarity 94.5%; Pred. No. 1.1e-138;

Matches 276; Conservative 10; Mismatches 6; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLODWAHAGRLDLAVAVPV 60

Db 194 AQLIHACMLVRKAGHYVQMAFMKLGALTGTYYVYDHLTPLODWAHAGRLDLAVAVPV 253

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 120

Db 254 VFSDMETKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 313

Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHHGAGSKTLGAPK 180

Db 314 QTRGLGCIITSLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHHGAGSKTLGAPK 373

Qy 181 GPITQMTYNDQDLVGVQAPPGARSMTPTCTCGSSDLVLTVRHADVIPIVRRRGRDSRGLLS 240

Db 374 GPITQMTYNDQDLVGVQAPPGARSMTPTCTCGSSDLVLTVRHADVIPIVRRRGRDSRGLLS 433

Qy 241 PRPVSYLKGSGGPGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292

Db 434 PRPVSYLKGSGGPGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 13

US-09-919-901-4

; Sequence 4, Application US/09919901

; Patent No. 6599738

; GENERAL INFORMATION:

; APPLICANT: Potts, Karen E.

; APPLICANT: Jackson, Roberta L.

; APPLICANT: Patick, Amy K.

; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT

; FILE REFERENCE: 0125-0005A

; CURRENT APPLICATION NUMBER: US/09/919,901

; CURRENT FILING DATE: 2001-08-02

; PRIOR APPLICATION NUMBER: 09/263,933

; PRIOR FILING DATE: 1999-02-08

; PRIOR APPLICATION NUMBER: 09/129,611

; PRIOR FILING DATE: 1998-08-05

; NUMBER OF SEQ ID NOS: 33

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 4

; LENGTH: 1692

; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: :

US-09-919-901-4

Query Match

Best Local Similarity 96.1%; Score 1473; DB 4; Length 1692;

Matches 276; Conservative 10; Mismatches 6; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLODWAHAGRLDLAVAVPV 60

Db 194 AQLIHACMLVRKAGHYVQMAFMKLGALTGTYYVYDHLTPLODWAHAGRLDLAVAVPV 253

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 120

Db 254 VFSDMETKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 313

Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHHGAGSKTLGAPK 180

Db 314 QTRGLGCIITSLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHHGAGSKTLGAPK 373

Qy 181 GPITQMTYNDQDLVGVQAPPGARSMTPTCTCGSSDLVLTVRHADVIPIVRRRGRDSRGLLS 240

Db 374 GPITQMTYNDQDLVGVQAPPGARSMTPTCTCGSSDLVLTVRHADVIPIVRRRGRDSRGLLS 433

```
Qy 241 PRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 434 PRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 14
US-10-191-966-4
; Sequence 4, Application US/10191966
; Patent No. 6790612
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191,966
; CURRENT FILING DATE: 2002-07-10
; PRIOR APPLICATION NUMBER: US/09/263,933
; PRIOR FILING DATE: 1999-03-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-10-191-966-4

Query Match 96.1%; Score 1473; DB 4; Length 1692;
Best Local Similarity 94.5%; Pred. No. 1.1e-138;
Matches 276; Conservative 10; Mismatches 6; Indels 0; Gaps 0;

Qy 1 AOGILIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 60
Db 194 AOGILIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 253
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGOGWRLLAPITAYSQ 120
Db 254 VFSDMETKIITWGADTAACGDIILGLPVSARRGREIILGPADNPEGOGWRLLAPITAYSQ 313
Qy 121 QTRGLLGCIIITSLTGRDKNQVEGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGAPK 180
Db 314 QTRGLLGCIIITSLTGRDKNQVEGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGAPK 373
Qy 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
Db 374 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 433
Qy 241 PRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 434 PRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 15
US-09-539-601-6
; Sequence 6, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 2201
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; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-6

Query Match 96.1%; Score 1473; DB 4; Length 2201;
Best Local Similarity 94.9%; Pred. No. 1.6e-138;
Matches 277; Conservative 8; Mismatches 7; Indels 0; Gaps 0;

Qy 1 AOGILIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 60
Db 106 AHGLIRACMLVRKVAGGHYVQMALMKLAALTGTYYVDHLTPLRDWAHAGLRDLAVAVEPV 165
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGOGWRLLAPITAYSQ 120
Db 166 VFSDMETKIITWGADTAACGDIILGLPVSARRGREIILGPADNPEGOGWRLLAPITAYSQ 225
Qy 121 QTRGLLGCIIITSLTGRDKNQVEGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGAPK 180
Db 226 QTRGLLGCIIITSLTGRDKNQVEGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGAPK 285
Qy 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
Db 286 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 345
Qy 241 PRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 346 PRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

Search completed: May 26, 2005, 22:03:44
Job time : 17.947 secs
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Fri May 27 09:41:15 2005

us-10-650-585-15.rapb

Page 1

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: May 26, 2005, 21:58:09 ; Search time 50.8409 Seconds
(without alignments)
1981.317 Million cell updates/sec

Title: US-10-650-585-15

Perfect score: 1532

Sequence: 1 AQLIRACMLVRKAAGHYV.....RGVAKAVDFIPVSMETTM 292

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1462099 seqs, 344972447 residues

Total number of hits satisfying chosen parameters: 1462099

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:*

- 1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
- 2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
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- 9: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep.*
- 10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep.*
- 11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
- 12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
- 13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
- 14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
- 15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
- 16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
- 17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
- 18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
- 19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
- 20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1532	100.0	292	13	US-10-017-736-15
2	1532	100.0	292	15	US-10-650-585-15
3	1532	100.0	303	13	US-10-017-736-10
4	1532	100.0	303	15	US-10-650-585-10
5	1532	100.0	334	13	US-10-017-736-4
6	1532	100.0	334	15	US-10-650-585-4
7	1532	100.0	341	13	US-10-017-736-14
8	1532	100.0	341	15	US-10-650-585-14
9	1532	100.0	352	13	US-10-017-736-13
10	1532	100.0	352	15	US-10-650-585-13
11	1532	100.0	380	13	US-10-017-736-12
12	1532	100.0	380	15	US-10-650-585-12
13	1532	100.0	393	13	US-10-017-736-11

14	1532	100.0	393	15	US-10-650-585-11	Sequence 11, Appl
15	1532	100.0	409	13	US-10-017-736-2	Sequence 2, Appl
16	1532	100.0	409	15	US-10-650-585-2	Sequence 2, Appl
17	1523	99.4	303	13	US-10-017-736-18	Sequence 18, Appl
18	1523	99.4	303	15	US-10-650-585-18	Sequence 18, Appl
19	1522	99.3	303	13	US-10-017-736-16	Sequence 16, Appl
20	1522	99.3	303	15	US-10-650-585-16	Sequence 16, Appl
21	1513	98.8	301	13	US-10-017-736-17	Sequence 17, Appl
22	1513	98.8	301	15	US-10-650-585-17	Sequence 17, Appl
23	1476	96.3	3010	16	US-10-333-449A-34	Sequence 34, Appl
24	1473	96.1	1692	10	US-09-919-901-4	Sequence 4, Appl
25	1473	96.1	1692	14	US-10-191-966-4	Sequence 4, Appl
26	1473	96.1	2201	13	US-10-029-967-3	Sequence 3, Appl
27	1473	96.1	2201	14	US-10-309-561-3	Sequence 3, Appl
28	1473	96.1	2201	16	US-10-789-355-3	Sequence 3, Appl
29	1473	96.1	2307	10	US-09-919-901-2	Sequence 2, Appl
30	1473	96.1	2307	14	US-10-191-966-2	Sequence 2, Appl
31	1473	96.1	3010	15	US-10-467-000-1	Sequence 1, Appl
32	1470	96.0	1692	10	US-09-919-901-11	Sequence 11, Appl
33	1470	96.0	1692	14	US-10-191-966-11	Sequence 11, Appl
34	1470	96.0	2307	10	US-09-919-901-9	Sequence 9, Appl
35	1470	96.0	2307	14	US-10-191-966-9	Sequence 9, Appl
36	1461	95.4	1692	10	US-09-919-901-18	Sequence 18, Appl
37	1461	95.4	1692	14	US-10-191-966-18	Sequence 18, Appl
38	1461	95.4	2307	10	US-09-919-901-16	Sequence 16, Appl
39	1461	95.4	2307	14	US-10-191-966-16	Sequence 16, Appl
40	1424	93.0	2201	13	US-10-085-476-2	Sequence 2, Appl
41	1362	88.9	3011	9	US-09-742-659-4	Sequence 4, Appl
42	1362	88.9	3011	10	US-09-891-894-3	Sequence 3, Appl
43	1362	88.9	3011	14	US-10-184-150-3	Sequence 3, Appl
44	1362	88.9	3011	15	US-10-328-997-3	Sequence 2, Appl
45	1362	88.9	3012	9	US-09-238-076-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1

US-10-017-736-15
; Sequence 15, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 292
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736-15

Query Match 100.0%; Score 1532; DB 13; Length 292;
Best Local Similarity 100.0%; Pred. No. 7e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	AQGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGLRDLAVAVEPV	60
Db	1	AQGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGLRDLAVAVEPV	60
Qy	61	IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAITYSQ	120
Db	61	IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAITYSQ	120
Qy	121	QTRGLLCIITSITGRDNQVEGEVQVVSSTATQSLATCNGVCTVPHGAGSKTLAPK	180
Db	121	QTRGLLCIITSITGRDNQVEGEVQVVSSTATQSLATCNGVCTVPHGAGSKTLAPK	180

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Qy 181 GPITQMTYTNVDQDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
|
|
|
Db 181 GPITQMTYTNVDQDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
|
|
|
Qy 241 PRPVSYLKGSGGPGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
|
|
|
Db 241 PRPVSYLKGSGGPGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
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|
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RESULT 2

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US-10-650-585-15
; Sequence 15, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 292
; TYPE: PRT
; ORGANISM: HCV
; US-10-650-585-15
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Query Match 100.0%; Score 1532; DB 15; Length 292;
Best Local Similarity 100.0%; Pred. No. 7e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAGLRDLAVAVEPV 60
|
|
|
Db 1 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAGLRDLAVAVEPV 60
|
|
|
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQ 120
|
|
|
Db 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQ 120
|
|
|
Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVVSATQSFATCVNGVCWTVFHGAGSKTLAGPK 180
|
|
|
Db 121 QTRGLGCIITSLTGRDKNQVEGEVQVVSATQSFATCVNGVCWTVFHGAGSKTLAGPK 180
|
|
|
Qy 181 GPITQMTYTNVDQDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
|
|
|
Db 181 GPITQMTYTNVDQDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
|
|
|
Qy 241 PRPVSYLKGSGGPGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
|
|
|
Db 241 PRPVSYLKGSGGPGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
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|
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RESULT 3

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US-10-017-736-10
; Sequence 10, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 303
; TYPE: PRT
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```
; ORGANISM: HCV
US-10-017-736-10

Query Match 100.0%; Score 1532; DB 13; Length 303;
Best Local Similarity 100.0%; Pred. No. 7.4e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAGLRDLAVAVEPV 60
|
|
|
Db 12 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAGLRDLAVAVEPV 71
|
|
|
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQ 120
|
|
|
Db 72 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQ 131
|
|
|
Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVVSATQSFATCVNGVCWTVFHGAGSKTLAGPK 180
|
|
|
Db 132 QTRGLGCIITSLTGRDKNQVEGEVQVVSATQSFATCVNGVCWTVFHGAGSKTLAGPK 191
|
|
|
Qy 181 GPITQMTYTNVDQDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
|
|
|
Db 192 GPITQMTYTNVDQDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 251
|
|
|
Qy 241 PRPVSYLKGSGGPGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
|
|
|
Db 252 PRPVSYLKGSGGPGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 303
|
|
|
```

RESULT 4

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US-10-650-585-10
; Sequence 10, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR FILING DATE: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-10
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Query Match 100.0%; Score 1532; DB 15; Length 303;
Best Local Similarity 100.0%; Pred. No. 7.4e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAGLRDLAVAVEPV 60
|
|
|
Db 12 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAGLRDLAVAVEPV 71
|
|
|
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQ 120
|
|
|
Db 72 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQ 131
|
|
|
Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVVSATQSFATCVNGVCWTVFHGAGSKTLAGPK 180
|
|
|
Db 132 QTRGLGCIITSLTGRDKNQVEGEVQVVSATQSFATCVNGVCWTVFHGAGSKTLAGPK 191
|
|
|
Qy 181 GPITQMTYTNVDQDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
|
|
|
Db 192 GPITQMTYTNVDQDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 251
|
|
|
Qy 241 PRPVSYLKGSGGPGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
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|
|
Db 252 PRPVSYLKGSGGPGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 303
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2
RESULT 5
US-10-017-736-4
; Sequence 4, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-4

Query Match      100.0%; Score 1532; DB 13; Length 334;
Best Local Similarity 100.0%; Pred. No. 8.4e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGLRDLAVAVEPV 60
Db 27 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGLRDLAVAVEPV 86

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 120
Db 87 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 146

Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTFPHGAGSKTLAGPK 180
Db 147 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTFPHGAGSKTLAGPK 206

Qy 181 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
Db 207 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 266

Qy 241 PRPVSYLKGSSGGPCLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETNMR 292
Db 267 PRPVSYLKGSSGGPCLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETNMR 318

RESULT 7
US-10-017-736-14
; Sequence 14, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-14

Query Match      100.0%; Score 1532; DB 13; Length 341;
Best Local Similarity 100.0%; Pred. No. 8.6e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGLRDLAVAVEPV 60
Db 50 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGLRDLAVAVEPV 109

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 120
Db 110 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 169

Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTFPHGAGSKTLAGPK 180
Db 170 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTFPHGAGSKTLAGPK 229

Qy 181 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
Db 230 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 289

Qy 241 PRPVSYLKGSSGGPCLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETNMR 292
Db 290 PRPVSYLKGSSGGPCLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETNMR 341

RESULT 8
US-10-650-585-14
; Sequence 14, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-14

Query Match      100.0%; Score 1532; DB 15; Length 334;
Best Local Similarity 100.0%; Pred. No. 8.4e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGLRDLAVAVEPV 60
Db 27 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGLRDLAVAVEPV 86

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 120
Db 87 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 146

Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTFPHGAGSKTLAGPK 180
Db 147 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTFPHGAGSKTLAGPK 206

Qy 181 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
Db 207 GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 266

Qy 241 PRPVSYLKGSSGGPCLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETNMR 292
Db 267 PRPVSYLKGSSGGPCLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETNMR 318

RESULT 6
US-10-650-585-4
; Sequence 4, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-4

Query Match      100.0%; Score 1532; DB 15; Length 334;
Best Local Similarity 100.0%; Pred. No. 8.4e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-14

Query Match      100.0%; Score 1532; DB 15; Length 341;
Best Local Similarity 100.0%; Pred. No. 8.6e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  AQLIRACMLVRKAAGGHYVQMAFMKLAALGTGVYDHLTPLODWAHAGRLDLAVAPV 60
Db
Qy      50  AQLIRACMLVRKAAGGHYVQMAFMKLAALGTGVYDHLTPLODWAHAGRLDLAVAPV 109
Db
Qy      61  IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGWRLLAPITAYSQ 120
Db
Qy      110  IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGWRLLAPITAYSQ 169
Db
Qy      121  QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVPHGAGSKTLAGPK 180
Db
Qy      170  QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVPHGAGSKTLAGPK 229
Db
Qy      181  GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
Db
Qy      230  GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 289
Qy      241  PRPVSYLKSGSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db      290  PRPVSYLKSGSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341

RESULT 9
US-10-017-736-13
; Sequence 13, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-13

Query Match      100.0%; Score 1532; DB 13; Length 352;
Best Local Similarity 100.0%; Pred. No. 9e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  AQLIRACMLVRKAAGGHYVQMAFMKLAALGTGVYDHLTPLODWAHAGRLDLAVAPV 60
Db      61  AQLIRACMLVRKAAGGHYVQMAFMKLAALGTGVYDHLTPLODWAHAGRLDLAVAPV 120
Qy      61  IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGWRLLAPITAYSQ 120
Db      121  IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGWRLLAPITAYSQ 180
Qy      121  QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVPHGAGSKTLAGPK 180
Db      181  QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVPHGAGSKTLAGPK 240
Qy      181  GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
Db      241  GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Qy      241  PRPVSYLKSGSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db      301  PRPVSYLKSGSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352

RESULT 11
US-10-017-736-12
; Sequence 12, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-12

Query Match      100.0%; Score 1532; DB 12; Length 352;
Best Local Similarity 100.0%; Pred. No. 9e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  AQLIRACMLVRKAAGGHYVQMAFMKLAALGTGVYDHLTPLODWAHAGRLDLAVAPV 60
Db      61  AQLIRACMLVRKAAGGHYVQMAFMKLAALGTGVYDHLTPLODWAHAGRLDLAVAPV 120
Qy      61  IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGWRLLAPITAYSQ 120
Db      121  IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGWRLLAPITAYSQ 180
Qy      121  QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVPHGAGSKTLAGPK 180
Db      181  QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVPHGAGSKTLAGPK 240
Qy      181  GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
Db      241  GPITQMTYTNVDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Qy      241  PRPVSYLKSGSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db      301  PRPVSYLKSGSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
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; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-12

Query Match
Best Local Similarity 100.0%; Score 1532; DB 13; Length 380;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPV 60
Db 89 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPV 148
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFGOGWRLAPITAYSQ 120
Db 149 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFGOGWRLAPITAYSQ 208
Qy 121 QTRGLLCIITSLTGRDNQVGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGPK 180
Db 209 QTRGLLCIITSLTGRDNQVGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGPK 268
Qy 181 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 240
Db 269 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 328
Qy 241 PRPVSYLKSGSGPGLLCPSCGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 329 PRPVSYLKSGSGPGLLCPSCGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 380

RESULT 12
US-10-650-585-12
; Sequence 12, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; PRIOR FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-12

Query Match
Best Local Similarity 100.0%; Score 1532; DB 15; Length 380;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPV 60
Db 89 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPV 148
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFGOGWRLAPITAYSQ 120
Db 149 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFGOGWRLAPITAYSQ 208
Qy 121 QTRGLLCIITSLTGRDNQVGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGPK 180
Db 209 QTRGLLCIITSLTGRDNQVGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGPK 268
Qy 181 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 240
Db 269 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 328

; SEQ ID NO 13
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-11

Query Match
Best Local Similarity 100.0%; Score 1532; DB 13; Length 393;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPV 60
Db 102 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPV 161
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFGOGWRLAPITAYSQ 120
Db 162 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFGOGWRLAPITAYSQ 221
Qy 121 QTRGLLCIITSLTGRDNQVGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGPK 180
Db 222 QTRGLLCIITSLTGRDNQVGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGPK 281
Qy 181 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 240
Db 282 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 341
Qy 241 PRPVSYLKSGSGPGLLCPSCGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 342 PRPVSYLKSGSGPGLLCPSCGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393

RESULT 13
US-10-017-736-11
; Sequence 11, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-11

Query Match
Best Local Similarity 100.0%; Score 1532; DB 13; Length 393;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPV 60
Db 102 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPV 161
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFGOGWRLAPITAYSQ 120
Db 162 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFGOGWRLAPITAYSQ 221
Qy 121 QTRGLLCIITSLTGRDNQVGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGPK 180
Db 222 QTRGLLCIITSLTGRDNQVGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGPK 281
Qy 181 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 240
Db 282 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 341
Qy 241 PRPVSYLKSGSGPGLLCPSCGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 342 PRPVSYLKSGSGPGLLCPSCGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393

RESULT 14
US-10-650-585-11
; Sequence 11, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; PRIOR FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-11

Query Match
Best Local Similarity 100.0%; Score 1532; DB 15; Length 393;
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Best Local Similarity 100.0%; Pred. No. 1e-144;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGLRDLAVAVEPV 60
Db 102 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGLRDLAVAVEPV 161

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQWRLAPITAYSQ 120
Db 162 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQWRLAPITAYSQ 221

Qy 121 QTRGLGCIITSLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLGAPK 180
Db 222 QTRGLGCIITSLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLGAPK 281

Qy 181 GPITQMTNVDDQDLVGVQAPPGARSMPTCTCGSSDLYLVTRHADVIIPVRRGDSRGSLLS 240
Db 282 GPITQMTNVDDQDLVGVQAPPGARSMPTCTCGSSDLYLVTRHADVIIPVRRGDSRGSLLS 341

Qy 241 PRPVSYLKGSGGPGLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 342 PRPVSYLKGSGGPGLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393

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RESULT 15
US-10-017-736-2
; Sequence 2, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-2

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Query Match 100.0%; Score 1532; DB 13; Length 409;
Best Local Similarity 100.0%; Pred. No. 1.1e-144;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGLRDLAVAVEPV 60
Db 106 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGLRDLAVAVEPV 165

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQWRLAPITAYSQ 120
Db 166 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQWRLAPITAYSQ 225

Qy 121 QTRGLGCIITSLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLGAPK 180
Db 226 QTRGLGCIITSLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLGAPK 285

Qy 181 GPITQMTNVDDQDLVGVQAPPGARSMPTCTCGSSDLYLVTRHADVIIPVRRGDSRGSLLS 240
Db 286 GPITQMTNVDDQDLVGVQAPPGARSMPTCTCGSSDLYLVTRHADVIIPVRRGDSRGSLLS 345

Qy 241 PRPVSYLKGSGGPGLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 346 PRPVSYLKGSGGPGLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

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